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"It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science in different parts of *Asia*, will commit their observations to writing, and send them to the Asiatic Society of Calcutta. It will languish, if such communications shall be long intermitted; and it will die away, if they shall entirely cease." SIR WM. JONES.

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p. 112,	line	8,	for	"Corypha"	read	"Borassus"
,, 131,	,,	28,	,,	"invertical"	,,	"in vertical"
,, 132,	,,	15,	*dele*	"respectively"		
,, 133,	,,	21,	for	"setting"	,,	"sitting"
,, 133,	,,	30,	,,	"longer"	,,	"larger."

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No. 1.—1901.

Abū-l-Faẓl's account of the Multān Sirkār in the Third Book of the Āīn-i-Akbarī.—*By* E. D. MACLAGAN, C.S.

[Read December, 1900.]

Abū-l-Faẓl in the Third Book of the Āīn-i-Akbarī describes among other provinces the Sūba of Multān (pp. 325 to 336 of Jarrett's Translation, Vol. II). This Sūba was divided into 3 Sirkārs one of which, the Sirkār of Multān, includes the present British district of that name. Having been stationed in that district for some years I venture to make a few suggestions regarding certain difficulties which present themselves in Abū-l-Faẓl's description of the Sirkār.

In commencing to describe the Sūba Abū-l-Faẓl gives an account of the rivers which flow through it; he says:—

> 'The Bihat joins the Cināb near the province of Shor and after a course of 27 kos they unite with the Rāvī near Ẓafarpūr and the three flowing collectively in one stream for 60 kos enter the Indus near Uc. Within 12 kos of Fīrozpūr, the Biāh joins the Satlaj which then bears several names, *viz.*, Har, Hārī, Daṇḍ, Nūrnī, and in the neighbourhood of Multān, confluent with the former four, their accumulated waters unite.'

The difficulties of this passage are fully considered in Col. Jarrett's note and I regret to say I can throw little light on the matter. Presuming the Jihlam and Cināb to have then met near Trimmū Ghāt (their present meeting place) the measurement of 27 kos (or say 54

miles, see Jarrett Āīn. II. 166 *n*) locates the junction with the Rāvī not far from the present point of junction and this although the Rāvī is known to have run at a later date, or at least to have had an alternative course, past Multān and to have joined the Cināb south of that city. There is now no trace of any village in the Multān district which can be identified with Abū-l-Faẓl's Ẓafarpūr.

As regards the still more mysterious sentence about the Biās and Satlaj rivers I may note that in the tract lying between the old bed of the Biās in the Multān district and the present bed of the Satlaj there are numerous meandering depressions which no doubt represent the courses of parts of one or both these rivers. Among the names by which these depressions are known are *Vihārī* and *Bhitārī* which are no doubt the counterparts of the *Hārī* or *Har-hārī* of our text. The word *Ḍhanḍh* is applied in this and other Panjab districts to any depression through which a river or its branch is liable to flow, and in some places the word *Wahind* or *Wend* is used in the same sense (*e.g.*, in the name of a village, Wahind Sarmānī—the word being connected with *wāhan* to flow). Another word applied to the old depressions in Multān is *Nai* (*e.g.*, Sukh-nai, Ṣidh-nai), and the Nūrnī of Abū-l-Faẓl should perhaps be read as 'Nūr-nai.' Depressions of the nature described are also known as 'wālas' or 'wāhs.'

The Sirkār of Multān contained five separate tracts, *viz.*:—

(i) Bet Jālandhar Duāb, between the Biās and Satlaj.
(ii) Bārī Duāb, between the Biās and Rāvī.
(iii) Ricnāu Duāb, between the Rāvī and Cināb.
(iv) Sindh Sāgar Duāb, between the Cināb and Indus.
(v) Birūn-i-Panjnad, outside the Five Rivers.

The reading of the word 'Bet' in 'Bet Jālandhar Duāb' is doubtful, see Jarrett II. 315 *n*.[2] It is said that in old documents the phrase is 'Bast' or 'Bist' 'Jālandhar Duāb;' but this is not among the variants quoted by Blochmann (vernac. p. 550). Bist is said to be a contraction for 'Biās-Satlaj,' after the manner of 'Bārī' 'Ricnāu,' &c.

The mahals of the Bet Jālandhar Duāb and the castes inhabiting them are given as follows by Jarrett. I have added remarks and suggestions against each:—

Mahals.	Castes.	Remarks.
Adamwāhan ...	Ḥasar	This village is now held by Sayyids, but is said in the settlement records to have been founded by one Adam, a Cannar by tribe. The word Ḥasar (حسر) must be an error for Cannar (چنڑ). The Cannars are still a well-known tribe in this neighbourhood, and own land in this village.

Mahals.	Castes.	Remarks.
Jalālābād ...	Bhīm	This village lies ten miles north of Lodhrān: there is an old mosque here and remains of the old town. Bhīm is probably a mistake for 'Tahīm:' the Tahīms being still found in all parts of the Multān district, but now chiefly in the south-west of the Kabīrwāla Taḥṣīl. Tradition however ascribes the foundation of this village to one Jalāl Mahtam and it is just possible that 'Bhīm' here thus stands for 'Mahtam,' but in other instances (see below) it is almost certainly a misreading for 'Tahīm.'
Dunyāpūr ...	Ūkī, Rānū ...	A well-known town in the Lodhrān Taḥṣīl. The tribe referred to is probably that of the Utherās, a common tribe in this Taḥṣīl, though no longer owning land round Dunyāpūr. Possibly the cognate tribe of the Nūns is also included so that the names of the tribes would read: 'Utherā, Nūn.'
Rājpūr ...	Jūnah ...	Rājapūr, some 3 miles north of Lodhrān, is indicated; and by Jūnah is meant 'Joyah,' a very important tribe along the Satlaj. There are still Joyas in the village, though they ascribe their immigration to the last century.
Shergaṛh ...	Kachī, Jūnah, Bikānah, Malāḥ	This is a village about 5 miles north of Mailsī, found in the time of the Emperor Sher Shāh and still showing ruins of its former prosperity. The Kachī are certainly Khichī, a tribe of Rājpūts still holding a good deal of land in the neighbourhood. Jūnahs = Joyas (see above). Bikānah, (v. l. Bhānah, etc.), I cannot identify: the Wigāmals and Sargānas, tribes of this Taḥṣīl, suggest themselves. The Malāḥ may refer merely to the boatman caste, but there are none of this tribe now in the neighbourhood of Shergaṛh.
Fatḥpūr ...	Jūnah ...	A big brick-built village, afterwards the head of a pargana: and, according to tradition, founded by the Joyas. It lies about 9 miles south of Mailsī.
Kahror ...	Jūnah ...	A municipal town, lying half way between Lodhrān and Mailsī. The Joyahs still hold a fair amount of land in this neighbourhood.
Khāibūldī ...	Jat and another name illegible [Bl. سزو سو. سڑھو یا نرھوا سروسو]	Khāi, now a heap of ruined mounds, lies about 15 miles north of Mailsī: there are local traditions as to its extreme prosperity in the days when it received canal irrigation from the Biās. It was called Khai-būldī from one Būldī, a Biloch, who is said to have founded it. The

Mahals.	Castes.	Remarks.
		tribe referred to may be 'Jat Mitrū,' the Mitrū Jats being the chief tribe now in that neighbourhood but the traditional date of the Mitrū immigration is after Akbar's time. Or the doubtful name may be read 'Saurū,' the Saurūs being a tribe in possession of land in the neighbourhood.
Ghalū Khārah	Kalū, Jat ...	This refers doubtless to the tract near the present junction of the Cināb and the Ghārah (as the lower Satlaj is locally called), which is inhabited, mainly, by the Ghallū tribe of Jats and its offshoots. The mahal would thus be 'Ghallū Ghārah,' and the tribe 'Ghallū Jat.'

Similarly as regards the Bārī Duāb:—

Islāmpūr ...	Bhīm, Maral ...	I have been told by a peasant that Islāmpūr was the old name for Gardezpūr in the Shujā'ābād Taḥṣīl; but the Marrals have left no traces of their power so far south and I expect the Islāmpūr is near Kasba (in the south of the Multān Taḥṣīl) which is the present headquarters of the Marral tribe. The Islāmpūr 'topa' is still spoken of as a measure of capacity in the Shujā'ābād Taḥṣīl.
Ismā'īlpūr ...	Maral ...	Site unknown. I have been told verbally however that this place lay near Kotlī Nijābat, some 12 miles east of Shujā'ābād: and this is not unlikely.
Multān Town ...	Bhīm, Shaikhzāda	The vernac. is 'Bulda Multān' and this term is applied in all Imperial sanads, etc., to the tract round the city (chiefly to the north and east) not to the city itself. The Shaikhzādas are the Quraishīs who held charge of the famous shrines of Bahā-ul-Ḥaqq and Rukn-i-'Ālam.
Tulambah ...	Sohū	This is Tulambah on the Rāvī in the Kabīrwāla Taḥṣīl and the tribe referred to is that of the 'Sahūs,' still very prevalent in those parts.
Villages of the parganah of Caukhandī		Caukhandī itself was in the Ricnāu Duāb (see below).
Suburban district of Multān	Bhīm	The vernac. is 'Ḥavelī Shahr.' The Havelī parganah of Imperial times seems to have stretched along the Cināb river north of Multān, and this is now the chief habitat of the Tahīm tribe in the district.
Villages of the parganah of Khaṭpūr		Khaṭpūr was in the Ricnāu Duāb (see below).

Mahals.	Castes.		Remarks.
Villages of the parganah of Deg Rāvī			This parganah was in the Ricnāu Duāb (see below).
Shāh'ālampūr			Site unknown. I have been told verbally by native informants that this lay somewhere in the south-east of the Multān Taḥṣīl.
Villages of the parganah of Khāi-būldī			This is the Khāi-būldī referred to on page 3.
Matīlah ...			This should probably be read as 'Metla' and held to refer to some part of the country held by the Metla Jats who are now scattered about in the north and east of the Multān Taḥṣīl.

The Ricnāu Duāb :—

Irajpūr and Deg Rāvī	Kharal	...	This mahal lay in the Montgomery district apparently between the Deg and Rāvī rivers. The Kharrals are still a powerful tribe on the Rāvī.
Caukhandī ...	ditto.		ditto. ditto.
Khaṭpūr ...	Jat, Sindha	...	There is an insignificant village of this name a few miles west of Sarāi Siddhū, through which the Rāvī now runs. As it is called Khaṭpūr Sandha, from the Jat tribe of Sandhas, there is little reason to doubt its representing the village of the text.
Dalībhati ...	Kharal	...	Not identified. The place was probably in the Montgomery district and the latter end of the name is probably 'Bhattī,' and refers to the tribe of that name.
Kalba	Jat, Sohū	...	This should be read 'Kulambah.' In later Imperial times the parganah north of the Rāvī was known as Kulambah and that to the south as Tulambah. The tribe in possession was that of the Sahū Jats already mentioned under Tulambah (p. 4).

The Sindh Sāgar Duāb :—

Villages of Islāmpūr			See under Bārī Duāb (p. 4).
Rangpūr ...	Jat ...	...	This is a well-known village near the Cināb north of Muzaffargarh.
Raipūr Kanki...	Bhīm ...	...	We should probably read 'Raipūr Kanakke.' There is a village called Amīrpur Kanakke on the west bank of the Cināb.
Miscellaneous villages			

(The Indus it must be remembered was much nearer to the Cināb then than it is now, hence the small number of mahals of the Duāb.)

Beyond the Five Rivers :—

The mahals of this tract need not be mentioned in detail as they are nearly all outside the present Multān district. It will be noticed however from the list that the Indus flowed north of Sītpūr in the Muzaffargarh district and that the Cināb apparently joined the Satlaj some miles to the east of the present point of junction. The village of Rāprī, about 8 miles west of Jalālpūr Pīrwāla, which now lies slightly to the east of the Cināb, then lay on the west. The 'Majloh Ghāzīpūr' of the text may be the present Ghāzīpūr in Taḥṣīl Shujā'ābād, but if so the river Cināb must have run very much to the east of its present course. There is moreover a tradition that the present Ghāzīpūr (which is a large brick village, once the headquarters of a Sikh parganah) was founded in the last century by the Nawwābs of Dera Ghāzī Khān. The list of mahals also includes a place called Ubāorah, and if this is the village of that name lying immediately south of Jalālpūr Pīrwāla, the Cināb must have then cut off a very considerable tract of country which now lies on its eastern bank.

Notes on the Sãsī Dialect.—*By* Rev. T. Grahame Bailey, B.D., M.A., *Wazīrābād.*

[Read January, 1900.]

'Sãsī' is the name given by Panjābīs to one of the criminal tribes of the Panjāb. The Sãsīs are a deeply interesting people. Sunk low in the scale of civilisation, addicted by nature and education to criminal habits, clinging to traditional beliefs peculiarly their own, living in the midst of, yet holding aloof from, other races, they invite the attention of students of ethnology and students of comparative religion alike. But their linguistic interest is paramount. Being criminals they conceal their language with scrupulous and extraordinary care. Many are the stories they tell of Panjābīs and Europeans, who attempting to become conversant with their speech, relinquished the project in despair, being baffled at the unforeseen magnitude of the task they had undertaken. Such stories are, needless to say, exaggerations.

The Sãsī Dialect may be subdivided into two, the main dialect, and the criminal variation. While the former will certainly repay time spent on it by students of language, the chief interest lies undoubtedly in the latter. Here we have the remarkable phenomenon of a dialect which owes its origin to deliberate fabrication for the purpose of aiding and abetting crime. Sãsīs themselves are unaware of its source; yet in the presence of strangers they unconsciously use a dialect which is not a natural growth but a conscious manufacture. So much has this become new part of themselves that Sãsīs from any district in the Panjāb will speak the same dialect and be ignorant of the fact that what they call this language is originally a conscious imposture, a deliberate fraud, a carefully laid plot to keep in natural darkness deeds which would not bear the light.

The main dialect is used by all Sãsīs, both children and adults, in ordinary conversation. It closely resembles Panjābī, though sometimes more like Urdū, and if spoken with a clear and deliberate enunciation, might be partially understood by a Panjābī. The criminal variation is absolutely unintelligible except to the initiated. Even

Sãsī children understand it very imperfectly. It is used in speaking in the presence of aliens. In the grammatical notes below I have indicated words belonging to this variation by the word 'criminal' in parentheses. The fact, above alluded to, that the Sãsī dialect resembles, sometimes Panjābī and sometimes Urdū, is worthy of attention. The 1st and 2nd pers. pron. give a good example of this. The singular is closely allied to Panjābī, but the plural is even more closely allied to Urdū. All Sãsīs can speak Panjābī, but do so with an accent and intonation peculiar to themselves.

Main Dialect.

Pronunciation: Vowel sounds are the same as in Panjābī. Consonants vary only in so far as they extend the use of the gutturally pronounced aspirates. In Panjābī initial bh, gh, jh, dh, ḍh, have a pronunciation entirely distinct from that which they receive in Urdū. In Sãsī we find in addition to these mh and nh, of mhārā = hamārā, and nhārā = sārā (criminal), *cf.* Panjābī nhērnī. This peculiar guttural sound is traceable, as in Panjābī, in vowels, but here no rule can be laid down. Experience alone will bring accuracy.

Grammar, greatly resembles Panjābī and Urdū.

NOUN, Scheme of Declension.

		Singular.	*Plural.*
Masc. nouns in—ā	Nom.	—ā	—ē
	Oblique	—ē	—ẽ
	Agent	—ẽ	—ẽ õrõ

		Singular.	*Plural.*
Masc. nouns in —ī, —ū and ending in consonant, and all Fem. nouns add the following endings.	Nom.		Masc. same as Sing. Fem. —ã̄
	Oblique	—ā	—ẽ
	Agent	—ẽ	—ẽ õrõ

Thus, bhūkal, dog (criminal), kūtā, dog (ordinary, *cf.* kuttā).

Gen. bhūkalā —gā, —gē, —gī, —gīã̄. } = { kuttē kā kē kī (Sing.)
kūtē —gā, „ „ „ } = { kī, pl. Urdū.

Dat. bhūkalā } gŭ = kuttē kō.
kūtē }

Abl. bhūkalā, kūtē thõ = kuttē sē.

Loc. bhūkalā, kūtē bich = kuttē mẽ.

Ag. bhūkalẽ kūtẽ = kuttē nē.

Similarly the same postpositions may be affixed to the plural endings as in the diagram, and so with other nouns, as kanājū, grain, (m.) bagelī, eight-anna bit (f.), bāṇ, sister (f.) Sing. bāṇā (obl.) bāṇẽ (ag.) Pl. bāṇã (nom.) bāṇẽ (obl.) bāṇẽ orõ (ag.).

ADJECTIVES.

	Masculine.		Feminine.		
	Singular.	*Plural.*	*Singular.*	*Plural.*	
Nom.	bhaiṛā	bhaiṛe	bhaiṛī	bhaiṛīã̃	= Panjābī bhaiṛā.
Obl.	bhaiṛe	bhaiṛẽ	bhaiṛiā	bhaiṛīẽ	

Adjectives ending in a consonant are indeclinable.

PRONOUNS, Personal, First Person.

	Singular.			*Plural.*		
	Sãsī.	Panjābī.	Urdū.	Sãsī.	Panjābī.	Urdū.
N.	haũ̃	maĩ	maĩ	ham	asĩ	ham
G.	mērā	mērā	mērā	mhārā	sāḍā	hamārā
D. Ac.	manũ̃	mainũ̃	mujh kō	ham kō	sānũ̃	ham kō
Ab.	mēsthē	mērē tē, &c.	mujh sē	ham thō	sāthõ̃, &c.	ham sē
Ag.	maĩ	maĩ	maĩ nē	hamõ̃	asã̃	ham ne

Second Person.

	Singular.			*Plural.*		
	Sãsī.	Panjābī.	Urdū.	Sãsī.	Panjābī.	Urdū.
N.	taũ̃	tũ̃	tū	tam	tusĩ	tum
G.	tērā	tērā	tērā	tuārā	tuhāḍā	tumhārā
D. Ac.	tanũ̃	tainũ̃, &c.	tujh kō	tumkō	tuhānũ̃	tumkō
Ab.	tēsthē	tērētē, &c.	tujh sē	tamthō	tuhāthõ̃, &c.	tumsē
Ag.	taĩ	tũ̃, taĩ	tū nē	tamõ̃	tusã̃	tum nē

Third Person.

	Singular.		*Plural.*	
	Sãsī.	Urdū.	Sãsī.	Urdū.
N. ...	ĕā	yih	ē	yih
	uh	wuh	uh	wuh
G. ...	iskā	iskā	inkā	inkā
	uskā	uskā	unkā	unkā
Ag. ...	in	isnē	inõ̃	inhõ̃ nē
	un	usnē	unõ̃	unhõ̃ nē

INTERROGATIVE.

	Singular.		*Plural.*	
	Sãsī.	Panjābī.	Sãsī.	Panjābī.
N.	kihṛā	kihṛā, kauṇ	kihṛē	kihṛē, kauṇ
G.	kiskā	kidā, kisdā	kinkā	kinã dā
Ag.	kin	kis	kinõ	kinã, kinã nē

Sãsī has a peculiar pronoun, tiārgā, without a parallel in Panjābī or Urdū. It means 'the thing or subject under discussion,' and is used to prevent a stranger's knowing what is being talked. It has a number of significations and quite baffles the uninitiated.

It should be noted that while in Urdū we have three 2nd Pers. Pronouns used in addressing a single person—tū, tum, āp—and in Panjābī two—tũ tusī,—in Sãsī there is only one—taũ. I have always been addressed by Sãsīs in the 2nd Sing. Of course in speaking Urdū and Panjābī they conform to the usages of those languages.

VERB, Auxiliary, Present Tense.

	Singular.			*Plural.*		
	First.	Second.	Third.	First.	Second.	Third.
Sãsī	haĩ	haĩ	hai	hã	hō	haĩ
Urdū	hũ	hai	hai	haĩ	hō	haĩ.

Past.

	Singular.		*Plural.*	
	Masculine.	Feminine.	Masculine.	Feminine.
Sãsī	sīyyã	siyyī	sīyyē	sīyyĩã
Panjābī	sā, sī	sī	sē, san	san, sĩã.

Dūtnā, eat (criminal) dūt-tā, dūtiā,

Aorist. Dūt —ẽ —ẽ —ē —ã —õ —ē.

Future. —aŋgṛī —aŋgṛā —agṛā —ãgṛē —agṛē —aŋgṛē [Fem. aŋgṛī, &c., ãgṛīã, &c.]

Imperf. dūt, dutīẽ (polite); plur. dūtō.

Cond. Past. dūttā (fem. dūttī) dūttē (fem. dūt tīã).

Prest. dūt-tã haĩ (fem. —tĩ haĩ, &c, plur. dūt —tē hã, &c.

Imperf. —tã sīyyã, &c.

Past. dūt-iã (fem. —ĩ), plur. —e (fem. —iã).

Similarly hōṇā, hōtā, hūwwā, fut. hõgṛā.

jāṇā jattā, gayā (gēāwā) jãgṛā.

Passive. Similar to Panjābī haũ māriā jãgṛā (fem. mārī jãgṛī) = I shall be killed.

The Panjābī passive form is also found. Kahīdā hai=ākhīdā hai= it is said. When the root of a verb is prefixed to another verb, the root usually adds —ī, *e.g.*, marī jattā=marjātā, kūlī nhoḍaṉgṛā (criminal)= Panj. karchaḍãgā=I shall finish off.

ADVERBS, call for little notice.

ēṭhī=Panj. iththē, here; ōṭhī=ōththē, there; kaṛē=kiththē, where? jaṛē=jiththē, where; īdā=iṣṭaraḥ, thus; ēṭhõ=iththõ, hence; ōṭhõ= ōththõ, thence; ēṭhõ tīkar=iththõ tīkar, thus far; nũ=udhar, thither; bhaḷak=bhaḷkē, to-morrow.

Bhī=phir, then, a second time, is very characteristic of Sãsī. It is so constantly used and is so gutturally enunciated that Panjābīs sneeringly employ 'bhī bhī karnā' or 'bhī bhī rē rē karnā' to signify the talking of a Sãsī, thus they will say "what were you doing among those who say 'bhī bhī rē rē?'" meaning "What business had you among the Sãsīs?"

āṉẽ=hã, yes; iwwiyō or iwkē=now, quickly.

PREPOSITIONS, generally as in Panjābī.

gharā gē aggē=ghar dē aggē, before the house.

The Urdū sē, from, is thõ; but when sē is used in comparison of adjectives, &c., it becomes saththā in Sãsī, *e.g.*, sārẽ saththā bhaiṛā= sab se kharāb.

INTERJECTIONS.

The most noticeable is 'duhāī re!' or criminally 'duhāṉgī re!' to express surprise or horror. The common word for salām is duā hōtī (du'ā hōtī).

Criminal Variation.

This is a thought out and deliberate attempt of surpassing interest to disguise the ordinary dialect. Sãsīs call it Fārsī, Persian, and many really believe that it is connected with Persian. Of course this is erroneous. One of the chief difficulties in deciphering (so to speak) the Sãsī dialect is the existence of these two varieties side by side. The criminal variety is marked by two distinct features, (1) a number of words not found in the other, (2) a series of semi-systematic changes of already existing words. These changes vary, the same word being sometimes changed, sometimes unchanged, sometimes changed in one way, sometimes changed in another.

Subjoined is a list of the principal changes.

s changed to n, nāb=sāb (sāḥib); nāt=sāt, seven.

s ,, nh, nhārā=sārā, all.

p changed to n, nūchnā = pūchnā, ask; naisā = paisā.
ph ,, nh, nhiṭṭā = phiṭṭā (abuse).
bh ,, nh, nhī = bhī = phir, then, &c.
bh ,, ch, Chattū = Bhattū = a Sāsī; chatānī = bhatānī, woman.
bh ,, jh, jhūkhā = bhūkhā, hungry.
b ,, c, catānā = batānā, shew.
ch ,, nh, nhōḍnā = chōḍnā = chōṛnā, leave.
n ,, kh, khigalnā = nigalnā = nikalnā, emerge.
d ,, kh, khas = das, ten.
l ,, k, kōhnā = lōhnā, mārnā, *cf.* Kashmīrī lāyun.

Changes formed by additions of letters, sometimes with vowel change.

b prefixed to vowels, bek = ek, bun = un, bĕā = ĕā, beṭhī = eṭhī.
k ,, ,, kōdmī = ādmī, man; kōṭh = āṭh, eight; kōdhā = ādhā, half; kundar = andar.
kh prefixed to consonants, kharājū = rājī = rāẓī, satisfied; khaḍiṭhā = dīṭhā = Panj. ḍiṭhṭha, Urdū dēkhā, seen.
ḍha ,, ,, ḍha bāṇ = bāṇ = bahin (Urdū) sister; ḍhagal = gala, neck.

Verbs whose roots end in a vowel have sometimes p inserted after the root:—

dēpnā = dēnā, give; lēpnā = lēnā, take; hōpnā = hōnā, be.

Verbs whose roots end in ah, change ah to aug.

Kaugnā, = kahnā, say; raugnā = rahnā, remain; ānā, come, and jánā, go, become asarnā and jasarnā, respectively.

jānā has two criminal past participles, one regular jasarnā, one gaugā, formed from gayā on the analogy of kaugnā, raugnā, &c.

g is added in mhārgā = mhārā = hamārā, our; tuārgā = tuārā = your; mērgā = mērā, my; tērgā = tērā, thy; kihṛgā = kihṛā, who? jihṛgā = jihṛā, who, *cf.* Pūnc dialect sāṛā, our; suāṛā, your; mhāṛā, my; tuāṛā, thy.

I have noticed occasionally peculiar double changes.

khadēpaṇṛā = dēpaṇṛā = dēṇṛā = dēũgā, I shall give; khajihṛgā = jihṛgā = jihṛā, who.

Special words:—It is almost impossible to distinguish between criminal and ordinary special words.

bōrā, boy
bōrī, girl
bhautā, brother
bāṇ, sister
bhatānī, woman

kajjā, khēṭ } jāṭ

gōliyā, nōkh } cūhṛā

baut, thief

bārmī, wife
kīnī, khatrī
cawal, rascal
bhūkal, kūtā } dog

ṭūṇḍā, pig
lālsī, cow
khimaṭ, buffalo
chābrā, he-goat
laudā, ox
kūdrā, horse
ṭīmī, food
khīsū, corn
caī, water
ṭaslī, bread, food
cīpṛā, piece of cloth
ḍhūlā, = guṛ, coarse-sugar
khaulā, house
nād, village
pirl, oil
sarband, arrangement
lāllī, night, cf. Arabic lail

lābū
baluā
khupnā
} , rupee

khāṭ, bed
baī = bāt, matter
raiŋk, meat
kōnnā, one anna
dhormī, two anna bit
chauglī, four ,, ,,
bagēlī, eight ,, ,,
gulūbā, tobacco
buṛknā
ṭōgnā
} , huqqa

paunī, shoe
bindī, ear-drop
gēḍī, Panj. jhamnī
reṭnā, lose

ḍīmnā
dūtnā
} , eat

gumāna = hide *cf.* Persian gum
nunjnā, sleep
ṭhauŋknā, sit
khīmnā, weep
lōhnā, beat, cf. Kashmīrī lāyun
ṭōgnā, drink

beī
gum
naththī
} , kūlnā, cup karnā, keep quiet

kūlnā, do
lugnā, die
&c., &c.

I close with a rather free rendering of the parable of the Prodigal Son in Criminal Sãsī, a strange combination truly. I have written below the lines a literal translation into Urdū.

"Bēk kōdmī sīyyā, buskē dhōr bōrē sīyyē, khīkā bōrā
ek ādmī thā (sī) uskē dō laṛkē the, chōṭā (nikkā) laṛkā
apnē ḍhabap tẽ kaugnē laggā bhaī jihṛgā kundrā bic hōpē buskā
apnē bāp sē kahnē lagā ki jō andar mẽ hai uskā
kōdhā hissa manũ dēp. Bun kaugiā lēpīlēp, bhī bun lēpī
ādhā ḥiṣṣa mujhkō dē. Usnē kahā lēlē, phir usnē lē
liyyā. Nhī buh ṭurī gaugā tē nhārē baluē nhārē naisē
liyā. Phir wuh calā (ṭur) gayā aur sārē rupaiē sārē paisē
nharāb kūlī nhōḍē. Nhī baṛā jhūkhā khatang hōpiā. Buskē
kharāb kar chōṛē. Phir baṛā bhūkhā tang huā. Uske
nās kuch nahĩ raugiā; nhī buh ṭūṇḍẽ gā khanaukar hōpī
pās kuch nahĩ rahā; phir wuh sūarõ kā naukar hō
gaugā, par jhūkhā lugī gaugā. Tãs apnē khadilā bic nhōciā
gayā, par bhūkhā mar gayā. Tab apnē dil mẽ sōcā
mērgē ḍhabaptẽ nās kitnē khanaukar hōpē tē buh dūtiā kūltē;
mērē bāp-kē pās kitne naukar haĩ aur wuh khāyā kartē;
tē manũ nahĩ khadēpagṛā? Haũ buskē nās ṭurī jasraŋṛā.
aur mujhkō nahĩ dēgā? Maī uskē pās calā jāũgā.
Jad buh kha ṭurī gaugā buskē khabap tẽ buskō naukhiā tē
Jab wuh calā gayā uskē bāp nē uskō dēkhā aur
baṛā khīmiā tē buskō ḍhagal lāī lēpiā: buskē nāstē baṛiã
baṛā rōyā aur uskō galē lagā liyā: uskē wāsṭē baṛī

nhoṇiã̃ nhoṇiã̃ pushākã̃ lēasṛiã̃ tē buskō nāstē raiŋk kūlī dēpiā.
sōhnī sōhnī poshākã̃ lēāē aur uskē wāsṭē gōsht kar diyā.

Buskā ḍhabaṛā bōrā naṛī ṭawiā; bun kaugiā haũ tērgē nās
Uska baṛā laṛkā saṛ paṛā; usnē kahā maĩ tērē pās

khrōj raugtā riā, taĩ manũ̃ kuch nahĩ dēpiā. Ḍhabap tẽ
rōz rahtā rahā, tūnē mujhkō kuch nahĩ diyā. Bāp nē

kaugiā khajihrgē mērgē hōpaĩ balūē naisē tērgē hōpaĩ; khīkā
kahā jō mērē haĩ rupaiē paisē tērē haĩ; chōṭā

bōrā lugī gaugā sīyyā, biwkē khajī wī ṭawiā, gawācī
laṛkā mar gayā thā, ab jī bhī paṛā, khō (gawāc)

gaugā sīyyā biwkē khalabī ṭawiā.
gayā thā ab mil (labh) paṛā.

On the antiquity and traditions of the Jāmi' Masjid and the Rauẓa of Haẓrat Maulānā Muḥammad 'Arab, at Sailkūpā, Sub-Division Jhenidah, District Jessore.—By Maulavī 'Abdul Walī, *Sub-Registrar of Sailkūpā.*

[Read March, 1899.]

On my arrival at Sailkūpā[1] in 1891, it struck me that the Mauẓa' was remarkable in many respects: it contained an old mosque, said to be in existence from long centuries; a *maqbira* (tomb) of a Muḥammadan saint, commonly called "Maulānā Ṣāhib," and of a Wazīr. Vague traditions regarding the Masjid, and the life of the saint, were current, but none—Hindus and Musalmans—could tell anything for certain about them. Even the *khādims* were miserably ill-informed. After a long time, while searching for old Farmāns, Sanads, Parwānas, Fatwās, Kābīnnāmas, and other documents, in the possession of certain families, I was able to form—with the help of certain old residents of the village—a tolerably correct idea about the antiquity and traditions of Mauẓa' Sailkūpā, and its ancient mosque. It was, however, with considerable difficulty and questionings that I came to know of the existence of these old deeds, and with still more entreaties, I had access to them. Owing to the want of education and culture, the Muḥammadans of the day do not trouble themselves about the relics of old things left by their ancestors. They only care for such documents that may be required by the Law Courts—from the period of resumption of stipendiary lands and grants.

The Mauẓa' Sailkūpā, within Jhenidah Sub-Division, is prettily situated on the left bank of the river Kūmār, ten miles north of Jhenidah. It is one of the principal trading places of Jessore. A Thānā was established here in 1863,[2] and a Sub-Registry Office in 1875.

[1] The Mauẓa' is spelt in various ways: Salkōpa, Sailkūpa, Saulkūpa, or as in Persian deeds Sōlkōpa. The etymology is very uncertain. Sail, Saūl, or Sal = a kind of fish, Kōpa or Kūpa = well, *i.e.*, well, or hollow place for Sail fish. The population of the village according to the census of 1891 was 4428.

[2] The part north of the River Kumar belonged to Pabna District before 1863.

It has an old *bazar*, a Zamīndārī Kachāri, formerly belonging to the Tē-āni Rājā of Maḥmūdshāhī Pargana, &c., but subsequently a masonary building was erected by Bābū Guruprasād Nandī, a Taluqdār, and now from several years the Narāil Bābūs' Kachāri is located therein.

An indigo factory, with a two-storeyed house has been pulled down. The Kumār, since about 50 years, has shifted a good deal, and several houses have been swept away. The site of the old Bāzār—which was on the south of the present one—with three rows of shops, have gradually disappeared. A *permit* ghāt, called Pañca-chatra ghāt, with an office, close to Qāẓi-pāṛā Khāl have also gone. The village is divided into Maḥalla's. The quarter in which the mosque with *tālāb* (tank) and the Rauẓa of the Maulānā Ṣāhib are situated is called Dargāh-pāṛā or Masjid-pāṛā. One Maḥalla is called Nagarpāṛā (town) inhabited mostly by tradesmen, and Çahās; another quarter is called Khāliṣa-pāṛā (or Government Khās lands).[1]

Murshid Qulī Khān in 1722 completed his *Kāmil Jumaʻ ṭūmārī* (or complete rent roll) and divided Bengal into Sarkārs, Caklās, and Parganas. On the establishment of the British Administration, Divisions, Zilas, and Parganas, &c., were substituted. Of the old Divisions, Pargana has survived. While examining old deeds, I found that Qaṣba (town) Sailkūpā was lying in Sarkār Maḥmūdābād, Pargana Tārā ūjiyāl, Muẓāf Ṣūba-i-Jannatu-l-Bilād Bangālā[2] (heaven of countries, Bengal). The present Zamīndārī Kachāri of Maḥmūdshāhī Pargana, &c., (incorrectly called Muḥammadshāhī) is still styled "Caklā Kachāri," and the several Parganās which constituted the *Caklā* are briefly called *Mahmūdshāhī Waghairahu.*[3]

The Jāmi' Masjid is situated in the centre of the Mauẓa', which was

Sailkūpā was one of the places from which price lists were sent to the Collector of Jessore as early as 1790 A.D. J. Westland, Report, p. 209.

[1] The following idols have been established at Sailkūpā by pious Hindus: Siddhēçvarī Kṛṣṇa-Balarām, and Rām-Gōpāl. The last named pair of idols are very famous, and have endowments of rent-free-lands.

[2] Maḥmūd Shāhī and Tārā-ūjiyāl are mentioned among the Parganas of Sarkār Maḥmūdābād in the *Āīn-i-Akbari*: Vol. II, p. 133, Jarrett.

[3] Mādhav Bhattācāryya of Ūllā (near Naldaṇga) was Court-Pandit of Sulṭān Ḥusain Shāh from whom he got five villages. His descendants, the Rājās of Naldanga, got from time to time several Parganas, about 34 or 35, which they had intact, till the estate became, to a great extent, lost to the family. Their *Cakla Kachari* was close to the Sub-Divisional head-quarter at Jhenidah (extracted from a Vernacular paper, also *vide* Report on the District of Jessore, its Antiquities, its History and its Commerce by J. Westland, Esq., Second Ed. 1874, pp. 42-49, but the information given in the *Report* is incomplete).

formerly called *town*, and measures inside 31½ feet by 21 feet. The wall is a massive one, 5¼ feet thick. The building may be divided into *two blocks* lengthwise, eastern, and western, each of which contains *three* cupolas or domes of conical shape 21 feet high from the floor, which go up to the utmost height of the roof, supported by arches, 12 feet high on two stone pillars beneath, not more than 1½ feet square and 6 feet high. Where the arch springs, which support the cupola above, there is a sort of capital. These two stone pillars are posted in the middle of the building at an equal distance from the walls, and from each other, in such a position that between them they support the whole edifice; the two cupolas or domes remain on both aisles of them, east and west; the remaining two domes are in the middle of these two pillars, also east and west,—thus making up *six domes* or cupolas. On the western wall, a *mimbar* or pulpit, and several curved *miḥrābs* or arches, with spaces to keep *cirāgh*, &c., are still to be seen; but they are in a bad state of preservation. Inside, the mosque is rectangular, outside, the walls on the east and west are projected outwards, and look like a huge *Rahū* fish. The cornices on all sides are very beautiful and well planned. Over the top of the *entrance* or facade the space appears to be raised, the bricks of which are carved and ornamented, but broken and fading away. There are oblong spaces designed to receive epigraphs which have never been inscribed. There are six small doorways, besides the main entrance—two on the north, two on the south, and two on the east, on either sides of the main entrance. The height on the outside from the ground is 18 feet, less by 3 feet, than the cupolas.

The materials with which the Masjid is built are burnt bricks and chunam of shells or *kāuṛi*. It appears to me a work of considerable skill. There is a piece of stone lying on the ground. This stone, and the two pillars, mentioned, are of the same colour and quality.

As to the origin of the Masjid (called in Imperial Farmāns *Masjid-i-Jāmi'* or Cathedral mosque), it is stated that King Nāṣir Shāh, son of Ḥusain Shāh, of Bengal, while travelling from Gauṛ on his way to Dacca (?) came to Mauẓa' Sailkūpā. With Nāṣir Shāh were Ḥaẓrat Maulānā Muḥammad 'Arab, a renowned Darvish, and *Murshid* (spiritual guide) of the King; Ḥakīm Khān, a Paṭhān; Saiyid Shāh 'Abdu-l-Qādir-i-Baghdādī; and a Faqīr. The Maulānā on seeing the village was very much delighted and said "I like this place, I will inhabit here." The above-mentioned three persons who were the disciples of the Maulānā wished also to remain with their Murshid at Sailkūpā. Nāṣir Shāh consented to this, and left his Wazīr Shāh 'Alī in the service of his *pīr*. The King granted a few Bigahs of *lākhirāj*

lands, and was pleased to call the Mauẓa' "Nāṣirpūr," after his own name.[1]

The above is the substance of a *dastāvīz* (attested by several persons) which the descendants of Shāh 'Abdu-l-Qādir-i-Baghdādī submitted about a century ago, when the stipendiary lands in their possession were threatened to be resumed, and enquiries were instituted as to their title.[2]

The further particulars about the mosque are these:—when the King left Sailkūpā, he directed that a Masjid should be built, and a tank excavated for the Maulānā, to supervise which the *Wazīr*, or Minister, remained behind. Shāh 'Alī (for that was the name of the Wazīr, or a high official, as I think he was) commenced building a Masjid, and digging a *tālāb*; but unfortunately Ḥazrat Maulānā Muḥammad 'Arab died when the work was in progress. The Wazīr built a Maqbira over the grave of the Maulānā, and soon after he too died—a small tomb was built for him on the west of the Maqbira of the Maulānā Ṣāḥib.

They say that Maulānā Muḥammad 'Arab was from Baghdād; and was very much venerated for his sanctity. He lived, curiously enough, on a wall, where food used to be sent to him by means of chīnkā (made

[1] Old men still remember the Mauẓa' being called *Nāṣirpūr* specially by Faqīrs. A Nāṣirpūrī man was considered to be a very clever fellow. If a Sailkūpaite ever said a witty thing, "O, he is a Nāṣirpūrī" was the remark of the other persons, present. The Mauẓa' is no doubt a very ancient one. Its narrow *galis*, congested population of tradesmen and others point out that it was a flourishing city centuries ago—before the British rule. Only royal mosques, established in towns or cities, where there may be a Muḥammadan Judge (Qāẓī) are termed Jāmi', or Cathedral mosques. It is very probable that Sailkūpā was the seat of a Nawāb or Faujdār. It is said that there were 50 Munshīs and Maulavīs in it, until a comparatively recent time. Sailkūpā men call the other villages Bhar, and their inhabitants Bharo (rustics). The latter call Sailkūpā nagar (town).

[2] In another paper the applicants wrote that there was a fight in 1149 B.S. between the Zamīndārs of Maḥmūdshāhī and Rājshāhī. The soldiers of the former being defeated came flying to Sailkūpā and were pursued by the soldiers of the latter, who set fire to, and pillaged, the houses of Qaṣba Sailkūpā. The royal Farmāns, &c., were then burnt down. This event is supported by Mr. J. Westland (Report, p. 44), who says that Rājā Raghū Dēv Rāy of Naldanga (Zamīndār of Maḥmūdshāhī) was deprived of his Zamīndārī for disobeying the summons of the Nawāb of Murshidābād, which was bestowed upon Rājā Rām Kant Roy of Nātōr (in Rājshāhī). This occurred in 1144 B.S. (1737 A.D.), but three years later the Nawāb restored it to the family. There is some confusion of dates. The Rājā's property was restored, and he was well treated at the recommendation of Mīr Ghulām Darvish Cousin of Mullā Khairu-l-Islām of Sailkūpā, who was, it is said, at Murshidābād, on his way from Delhī to Sailkūpā.

of twisted ropes) but none ever had seen him eating it. The King hearing of his sanctity went to see him. The saint being told that the King was coming to meet him, said to the wall upon which he was,—"Bādshāh jab ātē haī, diwār tū bhi kuch āgē barh." The wall moved on. The King being convinced of his sanctity, became a disciple of the saint, who spoke to the King that he wished to go to a Mauza' called Sailkūpā. After a long search, they came to Sailkūpā and landed. Having carefully examined the place, the Maulānā Ṣāḥib said, "this is my destination, I will not stir from here." After his arrival, many Muḥammadan families came to, and settled in, the village.

Historically I know nothing who the saint "Muḥammad 'Arab" was, but it is very probable that he came with Nāṣir Shāh, at whose command the Cathedral mosque—the silent spectator of a by-gone age—was built. Nāṣir Shāh (as stated above) was the son and successor of Ḥusain Shāh; but in history, he is called Nuṣrat Shāh or Naṣīb Shāh, who reigned after his father. I had, therefore, some doubt, at first, as to the authenticity of the contents of the aforementioned *dastāvīz*, but recent researches based on numismatic and epigraphical evidences have established the fact that the son and successor of the great Ḥusain Shāh was called Nāṣiruddīn Nuṣrat Shāh (who may briefly be called Nāṣir Shāh, as I have done in this paper).[1]

Another oral tradition, which I heard from an old man—descended from a very ancient family of Sailkūpā—says that the Masjid is the work of Ḥusain Shāh, who was a powerful monarch, and renowned throughout Bengal for his charities, and benevolent acts. The Ta'dāds of the rent-free lands granted—in recognition of their former claims—to the descendants of Shāh 'Abdu-l-Qādir-i-Baghdādī, by the British Court, also bear the name of Ḥusain Shāh as the donor. It is, therefore, very probable that Nāṣir Shāh came to Sailkūpā with his spiritual guide, while Ḥusain Shāh was reigning.

The brick-built tombs of the Maulānā Sāḥib, and the Wazīr Shāh 'Alī, are at a distance of about 35 feet, east of the mosque. The big tank on the north of the Masjid and the Rauza, which, it is said, had

[1] Sultān 'Alā'uddīn Ḥusain Shāh reigned from A.H. 899–925 = A.D. 1493–1518. His son who calls himself on *all* his coins and inscriptions hitherto discovered,

السلطان ابن السلطان ناصر الدنيا والدين ابو المظفر نصرت شاه ابن حسين شاه السلطان الحسيني

i.e., 'the Sultān son of the Sultān Nāṣirud-Dunyā wad-Dīn Abu-l-Muzaffar Nuṣrat Shāh, son of Ḥusain Shāh the Sultān, Al-Ḥusainī,' reigned from A.H. 925–939 = A.D. 1518–1532. The dates given in the Riyāzus-Salāṭīn, and other Histories, are generally incorrect.

a masonary ghāt or steps, is silted up. There is still to be seen the foundation of a pakkā wall which was intended to go round the mosque and the Rauẓa. The traces of a Bhāṇḍār-Khāna, as well as بلحوا خانه (whatever it may mean) as stated in several Imperial Parwānas, have well-nigh vanished. The Jāmi' Masjid is now in ruins. Neither it, nor the Rauẓa has any inscription. It appears that the work was suddenly stopped, before it was finished.

The common folk of Sailkūpā know little about the early history of the Masjid. They are, however, fond of telling beautiful stories regarding the—what they call, 'roofless'[1]—mosque, the stone pillars, and the black stone lying close by. The mosque, they say, was made in one night, by some supernatural agent, who after having built the masjids, at both the Paṇḍuās (Barā Paṇḍuā near Maldah, and Choṭā Paṇḍuā in the Hugli District) and other places, commenced building the Sailkūpā mosque. Very early in the morning, while it was dark, and the work was nearly completed, sounds of grinding *cirā* (prepared of rice) by garāls, or cirkutis by means of *Dhēṉki*—a sign of the approaching dawn—were heard, and the work was left half done.

The above story is an old one and I have heard it told in other places. It only means that the mosque is very old, beyond the memory of any living man, and that all traces of its origin are lost. This tradition rightly says that the work was left in an unfinished state, as surely it was.[2]

The alleged descendants of the disciples who originally came with the Maulānā Ṣāḥib, except those of the *Faqīr*[3] (that became extinct some four years ago) still survive, but they cannot correctly trace up their descent, and compared with other prominent residents of the Mauẓa', have held rather very inferior positions.

It is popularly believed that a boastful man cannot lift the black stone, but one, with humility and faith, would do so. Women are admitted into the mosque, who rub their breasts to the stone-pillars for the preservation of children about to be born, or for the recovery of diseases.

[1] As the domes are of conical shape and very high, and till lately covered with rubbish and vegetation, the report, that the mosque had *no roof* and in spite of it the rain-water did not fall within it, found credence among the credulous.

[2] The mosque was partially repaired in 1896-97 by the writer, but abandoned for want of support and co-operation of the local Musalmāns. The Rauẓa of Maulāna Ṣāḥib, and that of the Wazīr, were repaired by Munshī Qāimud-Dīn, in 1889.

[3] It is said that the name of the Faqīr was Candan Sikka, but this I could not find in any of the documents examined by me.

APPENDIX.

Of the many prominent residents of Sailkūpā in the last century, Saiyid Shāh Abū 'Ubaidullāh *alias* Mīr Ghulām Darvish was one. He went to Dehli, and acquired several Farmāns and Sanads from Emperor Shāh 'Ālam (A.H. 1173–1221 = A.D. 1759–1806) and other high officials. Some of these are briefly noted below, and one transcribed in full except the Schedule attached thereto. They show how matters stood a century and more ago under the dual form of Government—of the puppet Emperor, and his all-powerful officials, on the one side, and the pushing East India Company, on the other.

1. This Parwāna was written on the 16th Ramazān, the 9th year of the Julūs (Regnal year). It runs thus:—

هو

مولانا محمد عرب قدس سره

والا سید حسن بع

The Seal:

وزیر الممالک جملة الملک مدارالمهام اعتماد الدوله آصف جاه برهان الملک شجاع الدوله ابو المنصور خان بهادر صفدر جنگ یار وفادار سپه سالار فدوی پادشاه غازي شاه عالم ۱۱۷۵ -

Text:

متصدیان مهمات حال و استقبال سرکار محمودآباد مضاف صوبه جنت البلاد بنگالا بدانند بموجب فرمان والاشان وغیره اسناد درگاهي مرقوم سنه ۳ عهد مبارک منصب تولیت و امامت و خطابت مسجد جامع و روضهٔ منورهٔ قدوة السالکین حضرت مع اوقاف متعلقه واقعه قصبه سولکوپه عملهٔ پرگنه تارا اوجیال سرکار مذکور و في دکان چهار خرمهره و في تنکي یک مشت از هر جنس غله وغیره منجمله آمدني هرگنج و گوله و گهاٹ و هاٹ مع نواره متعلقه سرکار مذکور و موازي پنجاه و دو بیگه اراضي کسری و یک قطعه خانه بازي از قصبهٔ مذکور وغیره مواضعات معمولهٔ پرگنهٔ مزبور ایمه مدد معاش بالشرط خدمات بطریق ضهک بسیادت پناه حقایق و معارف آگاه انجب النجبا سید شاه ابو عبید الله المعروف بمیر غلام درویش الحسیني القادري از فرزندان زبدة العارفین حضرت بلا شرکت با فرزندان مقرر و بحال است درینولا مجدد فرمان واجب الاذعان مسطور یازدهم شهر جمادي الثاني سنه هشتم جلوس معلی در باب بحالی مناصب و وجوهات مرقومهٔ الصدر و تفویض

خدمات علی سبیل التعمیم و الوصیت بمشار الیه و بیدخلي ناظم الاسلام ولد خیر الاسلام که سند حضور انور ندارد مرحمت شده باید که انها موافق فرامین مطاعه بلا شرکت و مداخلت غیر بموصي الیه مقرر شناسند و وجوهات خرمهره و مشت غله وغیره سوای مال سرکار علی الدوام میدهانیده باشند و اراضیٔ مدد معاش حسب الضمن پیموده و چک بسته مع خانه باڑي نسلاً بعد نسل و بطناً بعد بطن بتصرف مشار الیه با فرزندان واگذارند و بوجه من الوجوه مزاحمتً نرسانند و هرسالً سند مجدد نطلبند درین باب تاکیداکید دانند شانزدهم رمضان المبارک سنه نهم جلوس معلی تحریر یافت مصد *

(عبارت ظهري)

مقررا ضمني بموجب فرو گذرانیده وکیل درویش که بدفتر رسیده انکه از راه تفضلات فرمان والاشان مسجد منصب تولیت و امامت و خطابت مسجد جامع و روضهٔ منورهٔ قدوة السالکین معه اوقاف متعلقه واقعه قصبهٔ سولکوپه عملهٔ پرگنه تارا اوجیال سرکار محمود آباد مضاف صوبهٔ جنت البلاد بنگالا مشتملبر عدم مداخلت ناظم الاسلام و خیر الاسلام بي سندي و تفویض خدمات علی سبیل التعمیم و الوصیت و في دکان چهار خرمهره و في تنکي یکمنّهي از هر جنس غله وغیره منجملهٔ آمدني هرگنج و گوله و گهات و هات معه نواره متعلقه سرکار مذکور و موازیٔ پنجاه و دو بیگه کسری اراضي و یکقطعه خانه باڑي از قصبه مذکوره وغیره مواضعات معمولهٔ پرگنه مزبور ایمه مدد معاش بلاشرط خدمات طریق ضهک بموجب فرمان والاشان عهد وغیره اسناد درگاهی قدیم بسید شاه ابو عبید الله المعروف بمیر غلام درویش الحسینی القادري یکی از فرزندان زبدة العارفین بدستور سابق با فرزندان فرزند بلا تغیر و تبدیل مرحمت گردیده و پروانه بارد از دفتر صدارت العالیه نیز حاصل گشته امیدوار فضل و کرم که بنام منصبداران خالصهٔ شریفه دستخط مزین شود که پروانه مطابق از دفتر مزبور نیز بنام درویش مذکور با فرزندان نسلاً بعد نسل و بطناً بعد بطن قیار کرده دهند که بخاطر جمع دران دایرهٔ قیام نموده در یاد الهي مشغول باشند شرح دستخط انکه حکم بنویسند ریا *

The word هو on the top stands for هو الله "He is God, &c." Then a little below to the left occur "Maulānā Muḥammad 'Arab—may his secrets be sanctified." In the next line similarly removed a little towards the left (certain words of which cannot be deciphered) occurs the name of "Saiyid Ḥasan *Baghdādī*" part of the last word italicised

is oblilerated. Saiyid Ḥasan was the person to whom Mīr Ghulām Darvīsh (the donee) traced his descent.

Then occur the following names and titles of the Minister in the seal affixed to the right side of the paper, the name of the Emperor occurring on the top :—" Wazīru-l-Mamālik Jumlatu-l-Mulk Madāru-l-Muhām I'timādu-d-Daula Āṣaf Jāh Burhānu-l-Mulk Shujāu-d-Daula Abul-Manṣūr Khān Bahādur Ṣafdar-Jang Yār-i-Wafādār Sipah-Sālār Fidvī-i-Bādshāh-i-Ghāzī Shāh 'Ālam—1175 A.H.

Next comes the document itself, in which occur the following :—The Mutaṣaddīs (officials), present and future—of Sirkār Maḥmūdābād, within the heaven of countries, Bangālā (Bengal) are hereby informed, that under the Sanads of His Imperial Majesty dated the 3rd year of the lucky reign " the posts of *Mutawallī* (donee), *Imām* (one who conducts the service), *Khaṭīb* (the reader of sermon) of the Masjid-i-Jāmi', and the Rauẓa-i-Munawwara (the illuminated sepulchre) of the Qudwatu-s-Sālikīn (foremost of the *Sālik*s) the Ḥaẓrat (here the space is left blank out of respect to the Maulānā, as his name occurs on the top), with—

The waqf properties pertaining thereto, situated in the Qaṣba (or town) of Sailkūpā, Pargana Tārāujiyāl, of the aforesaid Sirkār, are :—

four Khar-muhras (or shells) per shop;

a handful of all sorts of grains, &c., from every package (?) that are imported to every ganj, gōlā, ghāt, and hāt, with—

nawārā (revenue of Nawara Maḥal?) within the Jurisdiction of the above Sarkār.

Also 52 Bigahs of land (*Kasrī* ?), and a khānabāṛi (place for dwelling purposes) within the said Qaṣba and other villages of the aforesaid Pargana, were granted to Saiyid Shāh Abū 'Ubaidullāh, better known as Mīr Ghulām Darvīsh, Ḥusainī, Qādirī, one of the descendants of Zubdatu-l-'Ārifīn (one of the selected 'Ārifs), the Ḥazrat (blank, name on the top) as Aima-i-Madad-i-Ma'āsh (the aima tenure of Madad-i-Ma'āsh [1] description) ... not for any services to be rendered, &c., &c.

Now a fresh Farmān dated 11th Jumādī-uṣ-Ṣānī, the 8th year of the Julūs, conferring rights and privileges enumerated, to the above referred gentleman, and ousting Nāẓimu-l-Islām son of Khairu-l-Islām (who has no Sanad from the Huẓūr or His Majesty) has been issued. [The officials are then enjoined to enable the donee to get the above duties, except the Imperial revenue, &c., &c.].

[1] The royal grants in land called Madad-i-Ma'āsh were given as subsistence allowances to respectable Musalman families who used to devote themselves to the service of God, and who were of limited means.—*Āīn-i-Akbarī.*

The endorsement on the other side of the deed gives a *precis* of the application by the Wakīl of the Darvīsh (meaning Mīr Ghulām Darvīsh), and directions to send a communication to the officials of the Khālisa-i-Sharīfa (holy crown lands) with a schedule of the property and other titles and privileges, also two Bigahs of land close to the Rauza for building a *Gong-house* (ghariāl khāna), and a *khānqāh.*

2. This is the copy of a Parwāna of the above description issued by the said Minister on the 12th Rajab of the 4th year of the Julūs of Emperor Shāh 'Ālam, and therefore of a previous date. The copy is sealed by the seal of

خادم شرع الله قاضي القضات خالصهٔ شريفه قاضي عنايت خان

The Parwāna is addressed to the officials of Pargana Tārāujiyāl, Sirkār Maḥmūdābād. It directs:—

چون از روی سر رشتهٔ دفتر معلی ظاهر شد که ده بیگه زمین و یکقطعه خانه باڑي بر طبق سند حکمي از قدیم و موازي چهل بیگه اراضي مطابق پروانهٔ دفتر مرقومه بیست و هفتم ۲۷ ماه جمادی الثاني سنه ۴ بمهر صدرالصدور مولوي عاقبت محمود در وجه مدد معاش مشار الیه مقرر گردیده لهذا حسب الحکم الاعلی قلمي میگردد که انها اراضي و خانه باڑي مذکوره را بدستور سابق بحال و برقرار دانند و موازي چهل بیگه زمین بنجر اُفتاده خارج جمع لایق زراعت بر وفق پروانهٔ دفتر مسطور حسب الضمن در وجه مدد معاش درویش مرقوم با فرزندان و برای خرچ طایفه مقرر دانسته بتصرف حقایق آگاه مذکور وا گذارند *

It appears from the august daftar that...and 40 Bigahs of land under the Parwāna of the aforesaid daftar dated 27th Jumādī-uṣ-Ṣānī, 4th year of Julūs, under the seal of Maulavī 'Āqibat Maḥmūd, the Ṣadru-ṣ-Ṣudūr,[1] have been given to the above-referred gentleman (Mīr G.D.), accordingly it is written by command (of His Majesty) that they (the officials of Pargana Tārāujiyāl) should keep intact and maintain as before the...and 40 Bigahs of Banjar land[2]...as Madad-i-Ma'āsh of

[1] Ṣadrs were the highest Law Officers, who were in charge of all lands devoted to ecclesiastical and benevolent purposes. Ṣadru-ṣ-Ṣudūr = Head of the Ṣadrs, or Administrator-General. (Translation of the *Āīn* by Prof. Blochmann). Probably Maulavī 'Āqibat Maḥmūd was the title of Abū Sa'īd Muḥammad Maḥmūd. His son too was Ṣadru-ṣ-Ṣudūr. His grandson is Maulavī 'Abdu-l-Qādir of Silhat (Sylhet). Tazkira-i-'Ulamā-i-Hind by Raḥmān 'Alī (Newal Kisōr Press, Lakhnau, 1894. pp. 128–129).

[2] Banjar is that land which may be cultivated after an interval of five or more years, *Āīn-i-Akbari*, Vol. I, p. 207.

the said Darvish and his heirs, and for the expenses of the *Ṭalaba* (students), &c., &c.

On the back are endorsed the purport of the petition and other directions, as in the previous Parwāna.

3. This is a paper in which Mīr Ghulām Darvīsh as Mutawallī of "Rauẓa-i-Munawwara" points out to the Sādāt and Mashāikh of Sailkūpā that the Jāmi' Masjid and the tomb of the saint are now in a dilapidated state, owing to the inability and poverty, &c., &c.; and the students, servants, wayfarers, and others, are, therefore, in distress. Then follow details of other necessities. This document is attested by a large number of Muḥammadans (about 65) and is dated 1174 A.H. No signature is in Bengali.

[There can be very little doubt that this paper was used to get the royal grants.]

4. Copy of a Parwāna dated 8th Ẓil-Qa'da, 1168 A.H. bearing the seal of—

قيام الدين علي خان بهادر مهابت جنگ شجاع الملک قيام الدوله فدوي بادشاه غازي شاه عالم *

in which Kishen Dev Ray, Zamīndār of Pargana Tārāujiyāl, &c., is informed that Saiyid Bakhsh-ullāh, who is descended from Saiyid Shāh 'Abdu-l-Qādir-i-Baghdādī, and is Mutawallī of the tomb of the Maulānā Ṣāḥib, did not receive his fee of Rs. 2 for the expenses of the عيدين (both the 'Īds) last year through the delinquency of the residents, and the Zamīndār is directed to realize this sum.

5. This is a Sanad, dated 1179 A.H. = the 7th year of Shāh 'Ālam's reign, sealed by خادم الفقرا غلام درويش حسيني قادري appointing Mīr Saifullāh as Khādim of the Masjid, and of the *āstāna* (tomb) in consideration of the claims of his predecessors to the same. In this deed Mīr G.D. says that the office of tauliyat and Khiṭābat, &c., of the mosque and the holy *Mazār* has always remained in his (G.D.'s) family, and these duties have never been delegated to any one else.

[Considering the terms of the previous paper (4) where Bakhshullāh (son of Saifullāh) is mentioned as *Mutawallī*, the contention of G.D. appears to be unsupported.]

6. Copy of a *nuvishta* (letter) signed by Kishen Dev, Caudhurī or Zamīndār of Pargana Maḥmūdshāhī, &c., dated 15th Shawwāl, 1174 A.H.=11th Chait, 1168 B.S. addressed to Rām Narāyan Siqdār, Karmachari (officer) of Mauza' Dēvtala (a village close to Sailkūpā, where was located a Kachāri at the time). It runs:—that Mīr Ṭālibuddīn and Mīr Ghulām Darvīsh had disputes as to the Cirāghī (tenure) of Sailkūpā and Dēvtala. G.D. procured from His Majesty Sanads and Parwānas sealed by the seal of Ṣadru-ṣ-Ṣudūr. According to these, and a Sanad of the Nāib-i-Qāzī, and *nuvishta* of myself, G.D. got possession thereof. Subsequently Mīr T. too procured a *nuvishta*. Both have met. According to His Majesty's Sanad Mīr G.D. should get the possession.

7. In June 1842 a case under Regulation II of 1819 (popularly called Doēm Qānūn) was decided by Mr. Francis Lowth, Special Deputy Collector of Jessore. Government was plaintiff, Mīr Qiyāmuddīn, and after him Mīr Ṭālibuddīn (and others) were defendants. The suit was instituted on 7th March, 1837 A.D.

Under a *Rūbakār*, dated 19th Feb., 1839, Bansi Badan Majumdar was appointed *Āmin* for the measurement of the Lakhiraj property of Mīr Qiyāmuddīn and Mīr Ṭālibuddīn of Sailkūpā. On his arrival Mufiẓuddin *alias* Cānd Miyān presented a Farmān of Emperor Shāh 'Ālam granting to Mīr Ghulām Darvīsh *thirty thousand bigahs* of rent-free land as Madad-i-Ma'āsh, situated thus:—

North: The river Gaṛai,
South: The Kumār,
East: Sankōr Jolā (a silted-up water channel),
West: Pitamvarir nālā.

He also contended that Mīr T.'s lands were included within the land of the grant, and claimed as heir of G.D. the property—which was in possession of various persons. Cānd also presented the boundaries of 956 bigahs out of the entire Estate.

The filing of this Imperial Farmān produced great commotion. The Āmin reported the matter, upon which 14 more Āmins, each with a Piyāda and two rasan-gīrs (rope-holders) were sent out for the measurement of the land included in the Farmān.[1]

Krishna Dēv Dēv Rāy (of Naldangā), Zamīndār of the Parganas, Rādhā Caran Rāy, Zamīndār of Narāil, and Mīr Ḥaidar 'Alī—as heir of T. (deceased) and others, entered protests. Mīr Ḥaidar 'Alī applied that his ancestors came originally from Baghdād, and acquired 777

[1] In 1840 A.D.

bigahs of *lakhiraj* land at Sailkūpā, and remained in possession thereof. T. was the nephew (برادرزادہ) of his grandfather—Mīr 'Alī Riẓā. T. filed his Ta'dād in 1202 B.S. and became dispossessed from the greater part of his property. After his death, Mīr Ghulām Nabī, father of Ḥaidar, being unable to get possession of the property, gave it in ijāra to Brij Kisōr Nandī (father of Guru Nandī), and from him Ḥaidar was getting the rent.

Rādhā Caran went so far as to call the Farmān a forgery, and the case was decided accordingly. The Farmān was dated in the 10th year of the Julūs of Emperor Shāh 'Ālam and the 12th of Nawāb Ṣadru-ṣ-Ṣudūr corresponding with 1184 A.H.=1175 B.S. The Dīwānī was granted to the East India Company in 1172 B.S.=1766 A.D., so the Farmān was dated *three years* after that grant. Had it been genuine it would have received the sanction (Manẓūrī) of the Company, and entered in official records, as it was necessary in all such grants made subsequent to 1766. Neither G.D. nor his successors were in possession of the property. Ḥaidar got a decree for 100 bigahs and 4 kattas, as sole heir of T. whose possession was proved.

This Farmān was never returned. The particulars are extracted from an official Faiṣila of suits No. 1014 and 1015 of 1842.[1]

A careful perusal of the papers above noted shows that Mīr Ghulām Darvīsh imposed himself upon the Court, and the easily-gained officials, and by mispresentations acquired his Sanads, Farmāns, and Parwānas. His profession that his ancestors were always in the enjoyment of the mangement of the Masjid-i-Jāmi', the Rauẓa of the Maulānā Muḥammad 'Arab Ṣāḥib, and the properties thereof, are not only untrue, but also his claim that he was descended from the illustrious "Saiyid Ḥasan Baghdādī," was doubted. Mullā Khairu-l-Islām, and his son Nāẓimu-

[1] The Āmin on his arrival at Sailkūpā acted in a high-handed manner, forcibly summoning such persons as were interested in the matter, and demanding large sums as bribe; to this the villagers protested. The Āmin reported falsely that his piyāda was seized and beaten, and his *Caprās* taken away. The villagers too lodged counter charges of corruption and extortion on the part of the Āmin. After enquiry the Amin was worsted. The commotion thus produced had its comical side, a Musalmān poetestar composed a long Sārī or rhapsody which used to be long sung. The following lines are from it:—

"Bamsi Badan nāmē āmi khyāti rakhibō
Guru Nandir iṇṭ bhaṇgē Cāmd Miyār bāti libō
Majar Doēm Qānūn, tūmī dēkhālē
Lōkēr ēto sarabēngō (?)"

[I will keep prominent my name of Bansi Badan; will pull down Guru Nandī's bricks (house), and carry them to Cānd Miyān's. Thou comic doēm Qānun! (Regulation II), thou hast shown us so much of man's fool's-errand.]

l-Islām were powerful rivals, and they stoutly opposed the claim. So did Mīr Ṭālibuddīn. Mīr Ghulām Darvīsh's claim on thirty thousand bigahs of land under the Imperial Farmān, and the subsequent events under the Regulation II of 1819 are an episode in the history of the Mauẓa' not easily to be forgotten. But whatever the decision of the Special Deputy Collector, the Farmān was a genuine one—never doubted even by the formidable rivals of his day.[1]

Mīr G.D. built a Kachāri, somewhere close to the present Police station at Sailkūpā, but before many months had elapsed, a messenger is said to have come on boat, and induced G.D. to accompany him to the Nawāb or Emperor. Since then Mīr G.D. has not been heard of, or his claims been put forth—till a comparatively recent date by one, who was in no way related to him, and when there was neither Emperor nor Nawāb to decide the fate of the country.

[1] Under Regulations XIX and XXVII of 1793, and II of 1819 various sorts of rent-free land and other tenements were resumed. Sec. 18 of the last named Reg. laid down that no Farmān of the Emperor of Dehli, nor any Sanad or Parwāna of any Vazīr, Nawāb, or Rājā shall be considered valid ground for title, unless such deeds could be verified from official records, and their genuineness attested by living witnesses.

Supplement to Note on Vaisali and other places mentioned by the Buddhist pilgrims.—*By* W. Hoey, Esq., Litt. D.

(With Plates I and II.)

[Read January, 1901.]

[This paper is an additional Note to the article by the same author on the identification of Kusinara, Vaisali and other places mentioned by the Chinese pilgrims, published in this Journal, Vol. LXIX, 1900, Part I, pp. 74 ff. A map illustrating the same, and a facsimile plate of the Inscription of Jayādityadeva II. (*see* l.c., p. 88 f.) are issued together with it.—*Ed.*]

In October 1899, just before leaving India, I paid a visit to Sewan and some other places in the Chupra district, which seemed to me to invite examination. The result I desire to append to the article already submitted to the Society.

The first place to which I would call attention is Titaria, west of Sewan, between the Daha and Sondi rivers. It is remarkable for a very bold and massive stupa, which is visible from a great distance. An obvious derivation suggests what this locality will probably prove to be. It would not require much reflection to recall the word *tītar* (Sansc. *tittiri*), meaning a partridge. Now, in Hwen Thsang's Record we find it said that, beside the great brick vihāra, in which was the figure representing the Nirvāna, and its adjacent stupa with the pillar bearing a note of that fact, there was another stupa, built to commemorate the bird which plunged into the water and flying up shook its wings over a forest fire to extinguish it. Mr. Beal has rendered the Chinese word used to denote the bird by 'pheasant,' but this may be an error, or indeed the pilgrim may have been in error. The pheasant is not known in the plains of India, as far as my knowledge goes, but the partridge and the sand-grouse, both known as *tītar*, do occur: and I venture to think that Titaria is the place referred to by Hwen Thsang. In that case the huge stupa in its neighbourhood would probably be that before which stood the pillar recording the fact of the Nirvāṇa. I was not able to go to the stupa myself for the country round was flooded after the rains.

Coming from Sewan west by the road to Partabpur Factory, one crosses the Daha (Sondi) and then the Satnar Nāla, and leaving Titaria on the south, goes on to the Sondi. The people call the Satnar Nāla also Satnariya Nāli and say that in bygone days it was the stream at which suttees took place. It seems to me that the name may have some connection with the seven (sapta) princes who were prepared to fight with the Mallas for the relics of Buddha, had not Droṇa intervened and divided them. Bhāta-pokhar (Sansc. bhakta-puṣkara) may be the place where the relics were divided. At that place there are brick remains, probably of a stupa.

There are remains at Gosopāli not far from the Satnar Nāla. There is also farther on towards the Sonda a village called Malpāli or Nandpāli, supposed to be an old site.

In view of these observations I wish to withdraw the derivation suggested by me for Sewan, as Çavayāna, the place where the bier rested, and to say that Kusinara is not Sewan itself. Indeed, it occurs to me that Sewan may be no other than the word denoting boundary and mean the spot where one left the Vaisali territory when crossing over the river to the Kusinara kingdom.

The second place which I wish to bring to notice is Don Buzurg, or simply Don, a large village lying seven miles south of Mairwa, a station on the Bengal North-Western Railway line. The village site is a range of high ground composed of massive bricks, extensive and of undoubted antiquity. Close up to this site is a huge mound, distinctive in outline and character, bare, timeworn and rugged. It is called Droṇa's Mound. When I inquired who this Droṇa was, I was told that he was a great Muni, the Droṇācārya, who in ancient days taught the kings of the countries round about the use of arms. There seems to me to be here a confusion of the Droṇa who was the tutor of the Kuru and Pāṇḍu princes, with the Droṇa of Buddhist history, who far from teaching the use of arms, interposed to prevent the resort to arms and divided the relics of Buddha to the seven claimants. The mound is one which should be examined.

As I have now left India, I trust some one will thoroughly examine the sites which I have indicated, for I feel sure that the result will be a help in the cause of research as far as the identification of Buddhist sites in India is concerned.

The Kaluha Hill in the District of Hazaribagh.—*By* NUNDOLAL DEY, *Munsif, Tamluk.*

[Read April, 1901.]

[This paper was received by the Society in December, 1900. In the meantime Dr. M. A. Stein has published in the Indian Antiquary, Vol. XXX, 1901, March, p. 90 ff. a much more complete and accurate account on the Kaluha Hill, incorporating the results of a visit paid by him to this site in October, 1899. Notwithstanding this, the article by Babu Nundolal Dey is published here, as he has the credit of having first attempted to give a complete account of this site of antiquarian interest, of which previously only little was known. But for all the details in his paper, the reader should at the same time consult Dr. Stein's article, above referred to.—*Ed.*]

The Kaluha hill was visited by me on the 21st April, 1899. The Kaluha-pāhār, properly so called, forms the western boundary of a secluded and romantic valley situated on the eastern bank of the Lilajan river. It is situated in the district of Hazaribagh about 26 miles to the south of Buddha-Gaya, and 16 miles to the north of Chatra, and 6 miles from the Jori out-post of the Huntarganj Thana. The nearest village from the hill is Dantār at the distance of about a mile and a half. The valley is surrounded by hills on all sides, and is accessible only by two paths, one leading from the eastern side and the other from the western, that is, from the side of the Lilajan river. The eastern path is the easier of the two, though it passes through boulders of rocks and blocks of stones, as it takes a winding course over the hills, whereas the other path from the Lilajan side passes over the steep side of the rock. Though all the hills surrounding the valley are known by the name of the Kaluha hills, yet the name of *Kaluha-pāhār*, properly so called, is confined only to the range on the western side of the valley. My present remarks relate only to this western range, as the pilgrims and visitors do not see the other parts of the valley.

From the entrance over the eastern hill of the valley to the top of the western range or *Kaluha-pāhār*, it takes more than an hour to go. The intermediate space is dotted with small hills, knolls and low plateaus which add to the picturesqueness and grandeur of the whole

scenery. The western hill is the highest of all the hills that surround the valley; and the narrow path takes a winding course over the dizzy height of the steep rock amidst boulders which, from the entrance to the top of the hill, are marked with vermillion so that one may not lose his way. But the hill can be ascended by means of a *dooli*, as I did, if proper arrangement be made beforehand of men to take it up.

As the top of the western hill is approached, figures of Buddha in the conventional form of meditation are seen sculptured here and there on the rock. Just on the top of the hill, at the termination of the path, there is a narrow doorway in good order, 4 cubits in length, situated in the centre of a wall of hewn stones, which connect on either side the high precipices which form the natural wall of the place. Thus it will be seen that if the door, as there was evidently one before in the doorway, be closed, it would shut out all ingress into the top of the hill, except by the entrance on the western side of the hill which I mentioned before. The eastern doorway leads to a level landing-place which was evidently the court-yard of some building now in ruins, and the building is said to have been the residence of Rājā Virāta of the Mahābhārata. There is no artificial wall on the northern side of this range, as the towering precipitous rocks on this side form the natural wall; but on the western side overlooking the Lilajan, there are vestiges of walls of similar hewn stones filling up the interstices between high rocks, thus forming a continuous line of wall. There is a similar doorway, as above described, five cubits in length in the wall on this side also; and I have not the slightest doubt that formerly there was a flight of steps from this doorway leading down to the river Lilajan which laved the side of the hill before, though it has now receded a little further to the west. There are remains also of a similar stone wall on the southern side of this range.

The enclosure thus formed is more than one-fourth of a mile in length from north to south, and about one thousand paces in breadth from east to west. I speak of the measurements by guess only. This enclosure is divided in the middle by a deep ravine which has got its declivity from the north to the south. Though the ravine is now dry, yet on the northern side, notwithstanding its declivity to the south, the water has scooped out for itself a hollow resting place forming a beautiful pond about 200 cubits in length, overgrown with lotus plants and other water-weeds. The temple of Kuleçvarī is situated on the hill on the western side of the ravine, and on the eastern side of the ravine there is a wide plateau running up to the eastern border of the Kaluha-pāhār, rising in two tiers. This western hill and the plateau on the two sides of the ravine extend only to a short distance to the

south from the southern border of the pond; and at the southern side and on the southern portion of the enclosure there are other detached hills of which I shall speak hereafter.

Though the enclosure above described forms a natural stronghold, yet I did not find the remains of any fortress within it, excepting the slight trace of a battlement on the south-eastern wall. On the north-western side of the hill situated on the western side of the ravine, and not far from the western doorway above described overlooking the Lilajan river, is the temple of the goddess Kuleçvarī which means the Lady of the Kula mountain. It is a small homely square building facing east with a dome surmounting it: it consists only of two small rooms, and in the inner room the image of the goddess is placed in a niche in the central part of the western wall. The image of Kuleçvarī is the image of the fourhanded Durgā in her *Mahiṣa-mardinī* form and it is one cubit in height. Two fairs are held here every year in the months of Caitra and Āçvina, when, I understand, people from Gaya, Benares, Mirzapur and Chapra come to visit the shrine.

Just outside the temple at its northern side below a Pipal tree (*Ficus religiosa*), I found some dozen figures of Buddha in the meditative posture, but they are all in a mutilated condition, though they can be distinctly recognised as figures of Buddha. A small piece of stone among them contains a sculpture of the birth of Buddha in the lower compartment and his death in the upper, but the figures have become so much mutilated and obliterated that they can hardly be recognised. There were also two fragments of a frieze with small images of Buddha carved upon them. The Pāndās told me that formerly many such figures in the meditative attitude abounded the place, but they have been taken away gradually by the persons who visit the shrine.

At a short distance to the south of the temple of Kuleçvarī and on the same hill, is a small low cell facing west formed by two boulders of rock with a stone slab on the top of them. One must creep inside the cell to get a view of the image there. It contains an image which is worshipped as the image of Bhairoji. But on close inspection it was found to be the Jaina image of Pārçvanātha in the posture of meditation with the usual row of snake-heads on the top of the head. I could not make out whether the image was of white or black stone, as a thick coating of black paint has been laid upon it to make it appear glossy and shiny. Just in front of this cell and at a distance of only $1\frac{1}{2}$ cubits, is the back of another low small cell similarly formed: it contains a stone image of Buddha in the same contemplative attitude: the face has been mutilated, and the broken part has been smeared

with vermillion. But the hanging lobe of the ear and the matted top-knot on the head and other indications are sufficient to identify it with the image of Buddha. This image is not worshipped notwithstanding the vermillion paint, and the Pāndās told me if I liked I could remove it, indicating that they did not care for the image at all.

From this hill to the opposite side to the plateau, the dry bed of the ravine should be crossed. On coming to the slope of the plateau, one meets with a small cavern, the circular mouth of which is one cubit in diameter and three or four cubits in depth with little or no water in it: this is called the Sūrya-kuṇḍa or Pātāla-Gaṅgā. On the side of it is an image of Buddha. At a short distance from it, there are some figures of Buddha grouped together in one place. But it is evident that they are not *in situ*, and all of them are mutilated in some part of the body or other.

At a very short distance higher up on the north-eastern side in the same tier of the plateau, is a small temple (10 cubits by 10 cubits) with a domed top, standing on a rectangular terrace about two cubits in height from the ground. The temple faces north and it consists of the sanctum only. In the centre of the southern wall, there is a niche which contains a broken image of Buddha covered with heaps of small stones. The head, the arms and the trunk were broken: the arms were missing, but when I joined the head and portions of the trunk to the pedestal over which were the hands in the meditative posture upon the cross-legs, they made up an entire figure of Buddha. I was given to understand that whoever visits this temple throws a stone at the image. This is very significant. If it ever be proved that the temples and other buildings of the Buddhist period of this place have been destroyed,—and the destruction was not brought about by any natural causes,—it was certainly owing to Hindu hatred and not to Moslem bigotry.

On the north-west of this temple, there is a brick plinth of an oblong building called the *Baiṭhak*, 27 cubits in length from north to south by 10 cubits in breadth from east to west. It was evidently a large hall, as I did not find any sign of a partition-wall; but at the same time I did not find any indication of cells on any side.

Higher up on the same plateau but in the upper tier, there are the remains of a brick building (12 cubits by 10 cubits), which appeared to me to be a temple, which faced west as is clear from the flight of steps that led into it, but there was evidently a door also on the northern side. Just to the north of this building I found nine mortices on the surface of the level rock placed in three rows, indicating that there was a wooden frame-work which evidently served as a nave to the

temple. Behind this building and extending almost up to the eastern border of the western range, there is a brick plinth of an oblong building called the *Sabhā-Baiṭhak*, which is 58 cubits in length by 18 cubits in breadth. I could not find here also any vestige within of a partition wall or cells on any side. At a distance of about 50 cubits to the north-east of the *Sabhā-Baiṭhak* there are the remains of another oblong plinth, 21 cubits by 12 cubits. The whole of this upper tier is called *Māruā-Māruī*. Within the space enclosed by the mortices, there are several lines of an inscription engraved on the surface of the rock in Sanskrit, but so much obliterated by exposure as to have become nearly illegible. But it is clear that the commencing word is "Samvat," though I could not make out the date. It is said that at this place Virāta's daughter Uttarā was married.

To the north of the *Māruā-Māruī* and at the north-eastern corner of this range which I have called the western range of the valley, there is a precipitous rock which sharply rises against the sky. This is called the *Ākāçalocana*: it is the highest peak in the whole range. In the central part of the *Ākāçalocana*, there are 10 seated figures of Buddha carved in one place on the rock; each figure has got the figure of a woman on either side with *chowry* in hand. There are inscriptions in Sanskrit on the top of this row of figures, and I think some of the letters are fairly legible, and I could read some of them, though I could not make out any sense from them: a competent antiquarian, however, would I suppose be able to decipher them. Immediately below this row, there is a row of carved animals as elephants, horses and lions. A little further on there are five seated figures of Dhyāni Buddhas and five standing figures of Buddhas or Bodhisattvas carved in another place on the rock in one row, and there are inscriptions above and below the standing figures and between them. I could make out the figures "22" though I could not read the two preceding figures after the word "Samvat." Below this row, there are figures of animals as above described in one row.

I am quite sure that a competent antiquarian would yet be able to make out the dates of these inscriptions from the inscriptions themselves, though many of the letters have worn off and become illegible.

I could not, on account of my weak health, get upon the top of this hill (*Ākāçalocana*), but I have been told by those who have visited the peak that a little further up from the rows of figures above described, there are the remains of a brick chamber 18 cubits in length by 12 cubits in breadth, the bricks of which are of very large size. If this be so, there can be no doubt about the antiquity of the place. On the top of this hill beyond a narrow perpendicular fissure which has severed the

hill into two parts, there are two impressions of feet—evidently of Buddha—carved on a boulder which could be seen from below.

On the southern side of the enclosure, that is to the south of the hill on which the temple of Kuleçvarī and the cell of Bhaironāth are situated, and to the south of the hollow trough forming the pond, there is a hill on the side of the Lilajan, on which are to be seen the remains of a colonnaded hall. On the south-eastern side of this hill, there is another detached hill called the *Sātgharwā*, which is remarkable for its very curious boulders and cells. There can be no doubt that at some very remote period this hill was subjected to a very severe earthquake which shivered it into fragments, and which caused the fissure on the top of the *Ākāçalocana* on the northern side of the range. The huge boulders that are scattered about with boulders on their tops form very excellent cells where persons can live with convenience, and the cool breeze that blows through them during the hottest part of the day, induces the visitor to have his mid-day siesta here.

It will be remarked that excepting the image of Kuleçvarī, I did not come across the image of a single deity belonging to the Hindu Pantheon. The place is entirely Buddhistic. It is my strong conviction that Kaluha-pāhār is the *Makula Parvata* of the Burmese annals of Buddhism. Buddha is said to have passed his sixth Wasso (or rainy-season retirement) on the *Makula* mountain (see Bigandet's *Life or Legend of Gaudama*). *Kaluha* is simply a contraction and corruption of *Makula*, the letter म (*Ma*) of मकुल (*Makula*) having dropped by lapse of time, and the word *Kula* changed into Kaluha according to the guttural pronunciation of the people of the district. The word *Kula*, however, still exists in the name of the goddess Kuleçvarī (Kula + īçvarī) which means, as I have stated, the Lady of the Mountain Kula. Its propinquity to Buddha-Gaya and perhaps its situation near the ancient road to Rājagṛha or Çrāvastī which was often visited by Buddha, might possibly have led him to select this secluded spot as a fit place for passing the customary rainy-season retirement on the sixth year after attaining the Buddhahood. I have been told that a few years ago, when the dispute about the Buddha-Gaya temple was going on, the Burmese tried unsuccessfully to get a lease of the hill from the Pāndās and the proprietor. But I cannot vouchsafe for the truth of this statement. The known sanctity of the place as being the temporary residence of Buddha and its natural strong position, perhaps, led a neighbouring chieftain professing the Buddhist faith to fix his residence here at a later period. There can be no doubt, however, that the Brahmins appropriated this sacred place of the Buddhists and set up an image of Durgā, perhaps after the expulsion of Buddhism. They either

deliberately concocted the story that the place was the site of Rājā Virāta's palace in order to conceal its Buddhistic origin, or they were led to the belief by the five figures of Buddha, either seated or standing, carved on the hill of *Akāçalocana*, which they took to be the images of the five Pāṇḍavas who had taken refuge in the court of Virāta.

I feel quite confident that if proper measures be taken for the exploration of this place and the decipherment of the inscriptions before they get further obliterated by a competent antiquarian, it would not only elucidate the name of the place and fix the date of the sculptures and buildings, but throw much light upon many matters which are yet hazy and doubtful.

A Revision of the Symbols on the 'Karshapana' Coinage, described in Vol. LIX, J.A.S.B., 1890, Part I, No. 3, and Descriptions of many additional symbols.—By W. THEOBALD, M.N.S.L.

[Read December, 1899.]

In my previous paper on the symbols met with on the earliest Indian coinage, the 'Puranas' or 'Karshapanas' proper, I had followed the example set by Thomas and Sir A. Cunningham in drawing no fixed line between the above earlier symbols and those met with on the later coinages of Ujain and Eran, but the publication of the "Coins of Ancient India" has rendered it expedient and practicable to distinguish between the symbols of the earlier and later coinages, although many of the earlier symbols have survived and re-appear on the coins of more local and modern issues. The revision, therefore, which I now propose to make, consists mainly in the removal from my first list, of all symbols which are not known to occur on the early 'Karshapanas,' with a few others which are mere duplicates, unintentionally inserted or erroneously identified. The following symbols have been removed from the list.

No. 37 a Rhinoceros and 45 a Panther; both these identifications of Thomas I regard as erroneous.

Nos. 253 and 284, duplicates of other numbers.

No. 57, on later coins of the Kunindas.

Nos. 67, 75, 140, 161, 187, 188, 305, of doubtful identification.

Nos. 236, 241, from coins found at Wai.

No. 258, a Cappadocian symbol.

Nos. 259 to 277 inclusive, Scottish symbols.

Nos. 37, 62, 110, 129, 140, 154, 167, 173, 195, 202, 203, 204, 206, 207, 208, 209, 210, 211, 213, 214, 217, 219, 220, 221, 223, 226, 227, 228, 232, 235, 237, 238, 243 and 251, all on coins of Eran or Ujain, making a total of 65 symbols to be deducted from the 312, leaving a total of genuine symbols of the older coinage, of 247. All above that number in the present paper are additions now made to the list.

A few remarks will not be out of place here on some erroneous identifications of Indian animals made by previous writers, through unfamiliarity with Zoology and its technicalities; for example, an animal possessed of a long tail and crescentic, unbranched horns, cannot by any Zoologist be correctly described as a 'Deer.' This very error is made in J. As. Soc. Ben. for 1838, page 1051, Pl. XXXII, figs. 2, 3, 4, 5, 7, 8, 9, 10, which all represent specimens of silver and copper coins of Amogha-bhuti. On the obverse of these coins an animal is seen turned to the right. In the letter press this animal is termed a 'deer' and this error has been religiously perpetuated down to the present day.

In "The Coins of Ancient India" two excellent figures are given of two very perfect silver coins, the animal being termed a 'Deer' on p. 72. As these plates are photographs it is as well to consider them carefully, as they are to all intents and purposes as accurate for referring to, as the coins themselves. In both figures the animal displays a long bushy tail, and a pair of unbranched crescent-shaped horns, both of which characters absolutely prohibit its being considered a 'deer' whilst the second, fig. (No. 2), displays the rounded forehead and an exaggerated attempt to represent the moist 'muffle' which indicates pretty clearly that the animal is a buffalo. In 1841 Professor Wilson described the animal as a Stag in Ariana Antiqua, p. 415. In 1865 Mr. Thomas described the animal as a sacred deer, with "curiously curved horns and a "bushy tail" in the J. As. Soc. Ben., p. 65. In 1875 Babu Rajendralala Mitra described the animal as a "curiously antlered deer" in J. As. Soc. Ben., p. 82, despite the fact that nothing approaching an 'antler' is seen about the animal, and lastly Mr. Rodgers describes the animal as a 'deer' in his Catalogue of the Coins of the Indian Museum, p. 9.

Of course all this unanimity of error arose from not one of the above writers possessing any clear notions of the technical points which separate the Cervine from the Bubaline section of Ruminants, or those possessing deciduous horns from those whose horns are carried on a bony core.

Another Zoological error Mr. Thomas made, was in confounding the buffalo, with the elegant little 'Chikara' (Gazella bennettii) or 'ravine deer' as it is erroneously named by Anglo-Indians, (it being a Gazelle and no deer), when he described the helmet of the King (Huvishka) as guarded by buffalos' horns: see Jainism, Pl. II, fig. 16. This peculiar head-dress has not been figured either by Sir A. Cunningham, or in the British Museum[1] Catalogue of Coins of the Scythic Kings.

[1] *Note.*—With respect to the note to page 145, some doubt may, I think, be entertained, whether the coin quoted to support the contention of the object in the

Cunningham in his paper on the coins of the Kushans (Num. Chron. Vol. XII, Pl. IX), figures and describes four types of the Obverses of the gold coins of Huvishka, *A. B. C. D.* My collection contains specimens of *B* and *C*, only, but it also contains two specimens of the type described by Thomas, with horns on the helmet of the King, which is unnoticed in the other works quoted, though I make little doubt the type exists in both collections. The type is similar to *B* with a pointed and thickly-jewelled helmet, but the helmet is crossed by what Thomas describes as buffalos' horns, but which I regard as those of the elegant Indian Gazelle (Gazella bennettii;) united in front of the helmet by their bases, and carried up, and backwards, their tips appearing clear of the head behind, and pointing upwards. Two Gazelles' horns thus adjusted and suitably mounted would not only form an artistic ornament, but serve also as an efficient guard against a sword cut. The idea, however, of encumbering a man's head, by way either of ornament or defence, with a clumsy pair of buffalo horns is preposterous.

In 1858 The Honorable Walter Elliot published his Numismatic Gleanings in the Madras Journal of Literature and Science, wherein a number of Punch-marked coins are figured, many of which were reproduced with scant acknowledgment by Thomas in Numismata Orientalia, Part I, in 1874. Some of Mr. Elliot's remarks require notice. At page 229 we read "A dog, always in the same form, with his forelegs half crouching as if in play, is found on figs. 8, 11, 12, 13, 14, 15, 16, 18, 20, 21, 26," that is on eleven coins selected for figuring. Now in only one of these figures, (Fig. 8) is there the slightest connection indicated between the 'dog' and the 'Stupa' or 'Chaitya' whereon it is most usually represented as standing. In fig. 8, only, is a single chamber of the 'Chaitya' discernible under the dog's hind legs, whereas in my own collection, the association of the dog and Stupa is seen in no less than nine coins; and the only explanation that occurs to me is, that the artist, not understanding the significance of the little hemispherical marks under the dog's legs, omitted them, in some instances at least, as unintelligible and unimportant. Then again on p. 230 Walter Elliot describes the 'Taurine' or "ball and crescent" as associated in figs. 19 and 27 with a "plough." Now Thomas in N.O. fig. 9, reproduces these figures, with a slight

King's hand being an ear of corn, does anything of the sort, as a similar coin in my possession displays traces of rings beneath the object in question, which is usually regarded as an iron-bound mace. Neither the figure 9 of Pl. XXVIII, nor my own coin suggests to me an "ear of corn;" the design might be clearer, but I think it probably represents a bird, such as a falcon, in the attitude of crouching, before taking flight from the King's hand, or the mace whereon it is perched.

variation and without any reference to Elliot's paper. In Elliot's figures the upright object which I regard as a hammer (No. 299 of this paper) is represented as having on one side a broad oblong head, and a sharp adze-like cutting edge on the other, with a small bamboo handle passing through it, as is usual with Indian hammers to this day. This 'head' is altered in Thomas' figures, and shows a curved outline which does not belong to it, as though to support its claim to be considered as a plough. It is true that at p. 61, Thomas places a note of interrogation after the word "ploughs," but the alteration made in Elliot's figures is undoubted, especially as regards fig. 19.

At p. 230, Elliot remarks "The uppermost arch of the 'Chaitya' is often surmounted by a ball and crescent." This, I am convinced, is a slip of the pen for "a crescent" only, as the "ball and crescent" or 'Taurine' symbol is never, so far as I know, found imposed on the 'Chaitya,' where the crescent is usually present. Again on p. 230, Elliot remarks "The tree sacred to Buddha is seen on figs. 9, 13, 18 and 26." The tree on fig. 9 is a sacred tree with a railing below, and may be intended for the sâl ('Thiyah' of the Burmese, or the Shorea obtusa, Wall. which they hold sacred) beneath which Buddha was born. This symbol is No. 302 of this paper. The tree, however on figs. 13 and 18 and probably on 26 is quite different and may represent the cocoa-nut palm, Symbol No. 301 of this paper.

Passing now to the consideration of the Symbols on Punch-marked coins, Thomas in his Essay on Ancient Indian weights, in Numismata Orientalia, on p. 61, enumerates among the animals figured as symbols, "Deer," "Rhinoceri," and "Panthers." As regards the Rhinoceros the evidence is very insufficient. The first figure on the sixth line (5 bis), which is regarded by Thomas as a Rhinoceros, is repeated on page 62 in more detail, and is there clearly seen to be intended for a bovine animal, as the outline of the die is notched, to correspond with the hump, as is always the case where a bovine occurs on these coins, and the only figure I have ever seen which might claim to represent a Rhinoceros, was on a round copper coin of Ujain (?). The Rhinoceros, therefore, must be deleted from the list of animals represented on these coins. As regards the Bull too on these coins, it always seems to be made to face to the right, and the two figures in Num.-Orient., Plate I, which face to the left, are in my opinion heads of elephants, drawn vertically, and whose tusks are thus converted into horns:

In the same Plate there are four figures numbered 6, which at p. 61. Thomas describes as "Panthers, &c." Now of these four figures the first is probably a dog No. 25 of the present paper, and the remaining three figures are goats No. 19 of my list, and curiously

enough neither fox nor goat is included by Thomas in his Plate by name, though neither are rare on the coins, while so far as I am aware the 'Panther' is never represented. As from an examination of good specimens of these three figures regarded by Thomas as representing "the Panther of Bacchus "with his vine" (p. 59, Num.-Orient.) it is certain that the animal was provided with straight horns, the Panther must also be struck out of the animals which occur on the coins. The "vine" is there, but the animal has horns, and is really a goat.

The next instance of erroneous identification to be recorded is from the Catalogue of Coins of the Indian Museum by Mr. Rodgers. Here No. 7532 figured on Pl. II, fig. 1, is described as a horseman. Now neither horse nor horseman occur on any early Punch-marked silver coins, and the figure in question can be easily identified from the Plate as a humped Bull to the right with a Taurine in front of it, identical with No. 29, fig. 16, of my former paper, or No. 12 of my present list. A similar figure to the last on No. 7542, Pl. II, fig. 2 is also misnamed an elephant, which is the more curious as on both the above figures the hump is distinctly visible. Another rather amusing mistake is made with No. 7544, Pl. II, fig 3, where the common symbol of a peacock perched on a 'Stupa' is described as a very small horse: The importance of correcting such an error lies in the fact that the horse is an animal wholly absent (so far as I know) from these coins. On Nos. 7539, 7543 and 7545, a 'deer' is recorded, but as no figures are given, I am unable to suggest the correct attribution, though 'deer' I am confident is wrong.

Lastly, I must not permit any personal considerations preventing my inserting my own name among my illustrious predecessors in error, and I must, therefore, declare that my identification of the gangetic crocodile seizing a 'hilsa' was an error, which a reference to the original drawing of Walter Elliot's fig. 24 has enabled me to correct. In N.O. fig. 7 the tail of neither animal is given, but in the figure of Walter Elliot the bifurcated tail of a fish is clearly seen and hence I conclude a porpoise (Platanista) is intended, and I presume when the chance offers, a porpoise eats fish, as well as the crocodile. The incident was moreover long anterior to Buddhism and is made use of in Hesiod's description of the 'Shield of Herackles.'

A SEA VIEW.

"There was seen of mighty Ocean, safely fenced a spacious bay,
"All of purest tin its waters, smooth, as though a river, lay:
"Many a dolphin there was sporting, there was chasing shoals of fish,
"Which for safety fled before them, some on that side, some on this;

"And two dolphins, all of silver, half emerging from the flood,
"Crunched between their jaws the fishes, as though formed of flesh and blood."

Shield of Herakles. 207, 213.

In some parts of this paper I have applied the term 'Thyrsos' to objects seen on these coins. I am, of course, aware that the 'Thyrsos' proper is a wand or staff ending in a 'pine-cone,' but I think the term may be extended for want of a better, to any symbolic staff, with an enlarged apex, excluding the 'hasta pura' which though common on the gold Scythic coins is not met with on the silver 'puranas' or copper coins.

In the list of symbols now given, which occur on the silver Karshapanas (round or square) the first column contains the number of the symbol in the present list; the second column, the number and figure of the symbol in my previous paper, and the following are the abbreviations used:—

N.O. = Thomas' Essay on Ancient Indian Weights in the Numismata Orientalia, 1874.

A.I. = Cunningham's "Coins of Ancient India."

The numbers in brackets are the 'series numbers' of coins, when in my own cabinet.

O. and *R.*, for Obverse and Reverse symbols respectively.

B.M. = British Museum.

A.C. = Cabinet of Sir A. Cunningham.

N.G. and *W.E.* = Walter Elliot, Numismatic Gleanings, Madras Journal of Literature and Science, 1858.

1	34	1	O.	One male and two female figures. A.I., Pl. I, fig. 11. (8).
2	100	2	O.	Figure with three dots above.
3	118	3	O.	Figure with five dots above.
4	124	4	R.	Figure with water-pot in left hand.
5	91	5	O.	Plumed warrior with tall Club in left hand and water-pot in right. Cat. Coins, Ind. Mus., No. 12374, Pl. II, p. 7. (115).
6	143	8	O.	Figure, perhaps Agni.
7	36	7	O.	Hand, in a square area. A.I., Pl. I, fig. 12. (6).
8	35	10	O.	Elephant to right. A.I., Pl. I, fig. 5. (2).
9	218	11	O.R.	Elephant to left. W.E., Pl. VII, figs. (Obv.) 14, (Rev.) 13.
10	229	...	...	Elephant to right, margined with 'Taurines.' N.O.
11	65	18	O.	Humped Bull to right. (1).
12	39	16	O.	Do. with 'Taurine' in front. (87, 41) Cat. Coins, Indian Mus., No. 7532.
13	38	15	O.	Do. with 'Taurine' in front, reversed. (11).
14	184	17	O.	Do. with 'Fish' in front and above rump, in an oblong area. (94).

15	45	19	O.	Civet Cat. (Paradoxurus) and young.
	44	27	...	The animal is represented standing to right on a rock with some small animal in front of it. The ears are very peculiar. (123).
16	...	...	O.	An oval object, invested with numerous short spines: perhaps intended for some species of wild fruit. An obscure symbol. A.I., Pl. I, fig. 11.
17	41	21	O.	Hare in the Moon. In some coins the animal is within a crescent, which can hardly be intended to represent anything but the Moon. (27).
18	294	...	...	Hare in a circle surrounded by dots. This may be a variant of the last. Thomas figures it in J. As. Soc. Beng. 1865, Part I, Pl. IX, fig. 5. (83, 88).
19	42	20	O.	A goat with two straight horns, to right and in front
	224	221	...	of it an erect fruited stem, or vine, and above the
	311	...	...	goat's back a cup, (?) directed backwards. It is only on some coins that these three symbols can be seen together, but the idea is clear enough. (4, 50, 92, 94).
20	43	22	O.	A Kid. Whether the Kid forms part of the last symbol is uncertain. I can only detect it on one coin. (4).
21	139	23	O.	A Hare to right with a 'Taurine' directed backwards above and below it. A.I., Pl. I, fig. 6.
22	138	24	...	A small animal on a pole.
23	281	...	R.	A Rat in a circular area. (9).
24	...	...	O.	An Otter, with head erect to left, peering about as these animals are fond of doing. (47, 99). The animal stands within an irregular incused area.
25	22	49	O.	A Dog to right in an energetic attitude, as if barking, on the top of a Stupa. A.I., Pl. I, fig. 7. Thomas makes no allusion to the position of the Dog on a Stupa, which seems its usual place. (5, 85).
26	199	26	O.	A Fox to right, in a parallelogram, with two Fish
	284	...		below, also to right, in a tank, Coin No. 79. (See No. 314).
27	...	...	...	A Fox to left. (77).
28	40	25	O.	Perhaps intended for a Nilgao (portax pictus). The animal has straight horns and no hump.
29	279	...	O.	A duplicate of No. 11.
30	23	50	O.R.	Peacock on Stupa. (8). Thomas figures an example in J. As. Soc. Ben. for 1865, Pl. IX, Part I, p. 14, but without including it in his essay in N.O. though it occurs not rarely on both obv. and rev. of these coins.
31	46	30	O.	In my previous paper (relying on Thomas' figure in N.O.) I considered this animal to be a Crocodile, but after examining Walter Elliot's figure, Pl. VIII, fig. 24, I am convinced that a Porpoise is intended, as the above figure shows the expanded tail of a Fish (or aquatic mammal like the Plantanista Gangetica), an important character, which Thomas' figure fails to convey, or more truely omits!
32	47	29	O.	A Python incubating its eggs. (19). I have seen no other specimen than this.
33	48	31 32	O.	A Cobra. (Naija tripudians). (20).

34	54	34	O.	Another snake than a Cobra, perhaps intended for the repulsive Cerberus rhynchops. Thomas J. As. Soc. Ben. 1865, Pl. XI, fig. 8.
35	49	35	O.	A 'Trionyx' or river turtle with a 'Taurine' by the head. (126).
36	307	...	O.	A 'Trionyx' with two 'Taurines' on r., and a tank on the right. (45).
37	231	...	O.	A river Turtle, (perhaps a Batagur) between two fish. Thomas, J. As. Soc. Ben. 1865, Pl. XI. fig. 8.
38	84	...	O.	A Bovine with crescentic horns, to the left; perhaps a cow Gaour (Bos gaurus) is intended as the horns of the other (domestic) bovines are curved forwards. (60).
39	50	28	O.	A Frog, between two 'Taurines' with cusps directed outwards. (85).
40	...	...	O.	A Frog in a circular area. (33).
41	145	44	O.	A Fish in an oval area. A.I., Pl. I, fig. 13. The fish on these coins have an indented tail and a pair of fins on either side of the body.
42	51	41	O.	Two fish in a Tank, side by side. A.I., Pl. I, fig. 13.
43	52	42	...	Four fish round a square, which probably stands for an island within a piece of water like Sher Shah's tomb at Sasseram. Thomas figures this symbol in N.O.
44	185	43	O.	Four fish in a circular area. All the heads are directed to the right. B.M.
45	...	...	O.	Two pairs of fish, opposed to each other in a square tank. W.E., Pl. VII, fig. 6. With respect to these fish, Walter Elliot makes the native remark "Fish "occur in many forms as in figs. 6 and 10, where "they appear to be fixed on skewers." Of Course these so-called "skewers" are the lateral fins of the animals. These fins are usually displayed stuck out at right angles, or inclined slightly backwards. And he adds "In fig. 24 the "fish is pierced with several transverse rods." This is really very funny. The "fish" here represented is a porpoise seizing a small fish, and the "transverse rods" are merely the teeth of the porpoise which has its mouth wide open to take in its prey!
46	293	...	O.	Two fish, facing, in an oblong tank. Coin No. 85.
47	97	37	O.	Two fish, facing, with a 'Thyrsos' between. (109).
	69	39	...	
48	96	38	O.	Two fish, parallel, separated by a 'Thyrsos.' Coin No. 29.
49	193	183	O.	A fish on top of a cross, with a 'Taurine' on either side. Thomas N.O. Fifth figure on sixth line. B.M.
50	53	36	...	A Siluroid or 'Cat' fish. Thomas, N.O.
51	230	40	...	An Eel between two fish, in an oval area. W.E., Pl. VIII, fig. 22.
52	60	45	O.	A Scolopendra. A.I., Pl. I, fig. 8 Figured by Thomas, N.O., line 7, as a fish, p. 61.
53	...	...	...	Two fish, following in an oblong tank. It is combined with No. 26. (79).
54	282	...	R.	An Egg. (9).
55	121	207	O.	An obese cylindrical object, shortened by being thrown into short folds, in a narrow area. A.I., fig. 7. I can only guess this may represent a so-called double-headed snake. (Eryx Johnii).

56	122	...	O.	Two human figures.
57	160	...	O.	Three human figures; the man holding a Club.
58	194	...	O.	A Hare, and leveret following. B.M.
59	74	54	O.	An insect (?). (3). I have seen no second example.
60	246	223	O.	Jackal, Tree and Railing. B.M.
61	1	126	O.R.	A dot, sphere, or circle, usually seen in combination with other symbols.
62	2	127	O.R.	The crescent, usually combined with other symbols.
63	3	128	O.R.	The 'Taurine.' Nos. 61, 2, combined. (101).
64	4	129	O.R.	Twin spheres. (Sun and Full Moon). (Obv. 2, Rev. 28).
65	8	149	R.	Eight spheres round a central sphere, all similar in a circular area. (2).
66	14	187	O.	Dot in a triangular area. (2).
67	15	153	O.	Three spheres in a circle.
68	16	163	R.	Four spheres in a square. (30). N.O. Fourth figure of last line.
69	20	96	O.	Sphere surrounded by seven 'owl-heads,' A.I., Pl. I, fig. 2. The only symbol on the 3-Karsha pieces found near Rawal Pindi. By 'owl-heads' I mean a symbol made of the Greek ϕ (phi) with the top stroke deleted.
70	27	91	O.	Sphere surrounded by three 'Chattras' or umbrellas, the emblem of Royalty in Asia. The 'Chattra' is still used in our Dockyards under the name of the 'Broad Arrow.'
71	28	91	O.	No. 70, with three spheres between the 'Chattras.' (84).
72	29	94	O.	No. 70, with three Taurines between the 'Chattras.' W.E., Pl. VII, fig. 9. A.I., Pl. II, fig. 1, (27).
73	30	98	O.	No. 72, but Taurines enclosed in ovals. W.E., Pl. VII, fig. 16. A.I., Pl. I, fig. 6. (31).
74	31	93	O.	No. 70, but with three semi-circles between the Chattras.
75	32	102	O.	No. 70, but with 'lamps' between 'Chattras.'
76	33	95	O.	No. 70, but with owl-heads between 'Chattras.' (89).
77	63	99	R.	Central sphere surrounded by four 'Taurines' with 'cusps' directed to right. A.I., Pl. I, fig. 12. (127).
78	77	...	O.	No. 70, with three ovals between the Chattras. (54).
79	288	...	O.	No. 70, with nail-shaped objects between the 'Chattras.' (81).
80	299	...	O.	No. 70, but Chattras replaced by 'bidents,' (tridents with the central prong deleted) with 'Taurines' in ovals between. (22).
81	114	229	O.	Central sphere surrounded by six Chattras. A.I., Pl. I, fig. 3.
82	289	...	O.	No. 70, only lamps within ovals, between the 'Chattras.' (82).
83	...	...	O.	Central sphere surrounded by 'Chattras,' 'Taurines' and 'lamps.' (110).
84	...	...	O.	Central sphere surrounded by 'Chattras' fish and and symbol 85. (1, 2, 51).
85	...	...	O.R.	Two semi-circles with convex surfaces united. Thomas figures this in N.O. as a Rev. symbol. In composition i $_{\text{t}}$ occurs on the Obverse.

86	...	...	O.	Central sphere surrounded by six alternating 'Fish' and 'Chattras.' (60).
87	302	...	O.	Central sphere with three 'Chattras' separated by ovals, enclosing a 'Triskelis.'
88	...	...	O.	Central sphere surrounded by three pairs of 'Chattras,' 'Taurines' and 'Fish.' (32).
89	...	...	O.	Jackal to right with 'Taurine' over rump with 'cusps' to right and a 'Taurine' below with cusps to left. (9).
90	6	131	O. R.	'Triskelis' revolving to left, on central boss. A.I., Pl. II, fig. 2. (O. 56, R. 104, 121).
91	5	130	R.	'Triskelis' revolving to right. No central boss. (122).
92	7	132	R.	'Triskelis' revolving to right with very large boss, the arms being short and blunt like the cogs, which raise a tilt-hammer. (94, 100).
93	...	...	R.	'Triskelis' revolving to left. No central boss. (2).
94	9	185	O.	A Squarish or Taurine-like central object with a 'Taurine' on either side, and a pair of 'Taurines' with opposed 'cusps' above and below. Thomas figures this on a coin in J. As. Soc. Ben. 1865, Pl. IX, fig. 10. (89).
95	...	...	O.	A sphere between two upright 'Taurines.' Beneath is a pair of 'Taurines' with opposed 'cusps.' Above is a symbol which I regard as the 'Triratna' formed by three crescents in a line, the median one being a little raised above the level of the other two. These three are united by two crescents below. (26). I have seen no second example; a cast from this coin is in the B.M.
96	13	186	R.	Lingum-Yoni, or Baal-Peor symbol. (119).
97	25	51	O.	'Stupa' or 'Chaitya' of three chambers.
98	21	47	O.	Stupa of six chambers. W.E., Pl. VIII, fig. 23. A.I., Pl. I, fig. 13.
	...	...	O.	Stupa with Dog. See No. 25.
	...	...	O.R.	Stupa with Peacock. See No. 30.
99	25	51	O.R.	Stupa with crescent on the top. A.I., Pl. I, fig. 12. (O. 59. Rev. 88).
	252	...	...	
100	26	52	O.	Stupa with tree growing on top. (1, 2).
101	24	48	O.	Stupa of six chambers, with a 'lamp' in each. (11, 110).
102	176	46	...	Stupa of three chambers in hemispherical area.
103	278	...	O.	Stupa of six chambers surmounted by a 'Taurine,' and with two 'Taurines' on either side. (19).
104	...	...	O.	Symbol 102 with a lamp laid horizontally above. (116). Also on a coin belonging to Mr. Blackett.
105	191	63	O.	A dice-box shaped object, regarded by me as a 'Lamp.' The native earthern-ware saucer used as a lamp is often raised on a rude wooden support of this shape, which may therefore be conventionally regarded as a lamp. In the East, lamps are commonly seen on graves.
106	...	...	O.	A 'Taurine' in a square. (84).
107	215	...	R.	A Taurine in a circular area. The specimen figured by me, was on a Ujain coin, but it occurs on punch-marked coins also.

108	19	161	O.R.	Four Taurines in a circular area, having a common centre, or it may be described as a sphere surrounded by four crescents.....(O. 96. R. 27).
109	102	164	O.	Four 'Taurines' in a square with 'cusps' opposed. A.I., Pl. I, fig. 5.
110	...	...	O.	Four 'Taurines' in a square, with a crescent in the centre. (22).
111	...	...	R.	A double 'Taurine' with a common sphere and two crescents, Thomas, J. As. Soc. Ben. 1865, Pl. XI, line 16.
112	181	166	O.	A square divided into four compartments. In the top right a 'Taurine' in bottom left, a 'Taurine' inverted. In the remaining divisions a 'Lamp' laid horizontally. (82). If correctly drawn by me, fig. 166, is a variant of this, in the B.M.
113	197	165	O.	Four 'Taurines' in a square, with cusps opposed. A.I., Pl. I, fig. 4.
114	156	167	O.	A 'Taurine' with cusps to right, resting on a cross and a Triskelis, (No. 90), on the r., the whole in a triangular area.
115	133	150	...	Four 'Taurines' in a four-spoked wheel, the 'cusps' pointing outwards.
116	93	108	R.	A 'Taurine' with a cross above. W.E., Pl. VII, fig. 16.
117	175	168	...	A 'Taurine' to left of a square in an oblong area.
118	146	169	O.R.	A sphere between two 'Taurines' in an oblong area O. A.I., Pl. I, fig. 1, R. (82).
119	179	170	...	A 'Taurine' to the left of a 'Thyrsos' in a circular area.
120	18	179	O.	Crescent on a pillar, between two 'Taurines' in a circular area. (127).
121	66	97	O.	Symbol No. 70, with three shields between 'Chattras' each with a central dot. N.O.
122	98	181	O.	A 'Thyrsos' between twe 'Taurines' in an oval area. A.I., Pl. I, fig. 8.
123	103	103	O.	A circle with two 'Chattras' and two 'Taurines' alternately arranged. It is not clear whether a staff or handle is present or not.
124	115	178	O.	A 'Thyrsos' between two circles on long stalks, united with the 'Thyrsos' below, the whole on an oval area. A.I., Pl. I, fig. 2.
125	116	115	R.	Variant of the Lingum-Yoni, in a horse-shoe area. (19).
126	64	16	R.	This symbol may be described as formed of two fish with a pair of fins only, and the tails juxta-posed to a central sphere, with a crescent on either side with 'cusps' directed outwardly; or it may be described as two modified 'Taurines' each with a cross-bar, and the 'cusp' resting on a central sphere, with a crescent on each side. It is a common Reverse symbol. A.I., Pl. II, fig. 2. (3, 36).
127	125	105	O.	Two 'Chattras' and two 'Taurines' arranged in form of a cross.
128	126	151	O.	An eight-pointed star within a circle, surrounded by six 'Taurines.'
129	132	106	O.	Two 'Chattras' and two 'shields' on a sphere. At the top is a 'Taurine,' and perhaps there is a handle below. This symbol is related to No. 123 and better specimens are required to determine whether a handle is present below or not.

130	144	159	O.	Three 'fish' ranged round a central dot; in a neat tripartite area.
131	130	60	O.	A 'Coracle' (?) with three poles, the centre one supporting a crescent.
132	152	213	O.	A rude squatting figure (?).
133	155	184	O.	Four 'Taurines' round a central pillar surmounted by a crescent, within a square area.
134	180	182	...	A Cross between two Taurines. Above the cross is a short cross-bar supporting some object.
135	192	53	O.	A Stupa of three chambers, in a hemispherical area with two fishes in an oblong tank below. W.E, Pl. VII, fig. 10.
136	201	230	O.	A square base supporting a pole, surmounted by a fish to right, with a pair of Taurines on either hand. A.I, Pl. I, fig. 12.
137	248	225	...	Lingum symbol, in a twelve-cornered figure within a circular area. B.M.
138	...	...	...	Variant of No. 64, two well designed hexagons within a narrow oval area contracted in the middle. B.M. See No. 310 for correction.
139	215	188	...	Taurine in a round area.
140	10	139	O.	Straight-rayed solar wheel. A.I., Pl. I, fig. 7. The commonest symbol on these coins.
141	11	140	O.	Eight-spoked wheel. W.E., Pl. VII, fig. 15.
142	12	141	O.	Four-spoked wheel.
143	205	143	O.	An eight-spoked agricultural wheel. (84).
144	233	...	...	A cross within a circle, N.O. The fourth figure on the eighth line.
145	234	...	R.	A twinned Taurine in a circle. N.O., the eighth figure on the last line.
146	17	136	O.R.	The 'Cotton-bale' symbol, a variant perhaps of the 'Caduceus.'
147	55	55	O.	A raised grain-store. A 'Thyrsos' on the left and a 'Taurine' on the right. (120).
148	56	118	O.	A Food receptacle for birds (?) with Taurines below and loop to right. This is the symbol termed by Mr. V. A. Smith, a "cross" in his description of the objects found in the Piprahwa Stupa. Jour. Roy. As. Society 1898, p. 586, fig. 10. I interpret the symbol as a Buddhist monk's begging bowl, the two 'ears' on the right being the ends of the band helping to support the bowl, which is elevated on a T. shaped cross piece, to raise it above the reach of Dogs or Cats. Food altars on this principle are common in Burma, and this I take to be the archaic form of the structure. Thomas figures it in N.O., and calls it a "Magic formula" (Fig. 16, p. 61), which conveys nothing, and is besides not even a plausible explanation. (54).
149	148	194	O.	The 'Wizard's foot' A.I., Pl. I, fig. 10.
150	...	...	O.	A fish (or variant of a 'Taurine') in a hemispherical area. A.I., Pl. I, fig. 10.
151	151	190	R.	Fish in a rhomboidal area. A.I., Pl. I, fig. 10.
152	108	158	R.	Pyramid of six balls in a triangular area. A.I., Pl. I, fig. 10.
153	112	138	O.	Oblique-rayed Solar wheel. A.I., Pl. I, fig. 3.
154	150	156	R.	Nine spheres ranged round a circle enclosing a sphere. A.I., Pl. I, fig. 10.
155	159	133	O.	A 'Triskelis' to right and 'Cotton-bale' united.

156	...	...	...	A sphere between two inverted 'Taurines' in a flattened hemispherical area.
157	249	226	...	Three spheres in line, in an oval area. B.M.
158	290	...	O.	A 'Taurine' in a square area. (84).
159	...	...	O.	Triskelis to left (No. 90) on the right of a food-receptacle. A.I., Pl. I, fig. 14. (56, 59).
160	58	56	O.	Bow and arrow. A.I., Pl. I, figs. 2 and 4. (84).
161	113	57	O.	Bow and arrow in a square area.
162	105 287	58	O.	Bow and arrow with 'Taurine' behind, the cusps touching the string. (21, 81).
163	59	9	O.	Scales for weighing grain. The scales represented on these coins consist of a 'beam' of bamboo, (no doubt) a fixed weight at one end and a round dish to receive grain and other commodities to be weighed. There is also a square object, which may represent a stone whereon the weighman sits. (105).
164	61	59	O.	Three huts, the central one taller than the others. (122, 124). N.O. fifth figure on line 10, where they are termed 'Chaityas,' p. 13, but as the householder on these coins is often accompanied by two females, I prefer to consider this symbol as a domestic habitation.
165	...	...	R.	Sphere on a very short stalk, perhaps the fruit of the 'Goler' (Ficus glomerata). W.E., Pl. VII, fig. 13.
166	68	89	O.	A central 'Thyrsos' between two poles with sloping cross-pieces and semi-circular objects at the ends. This symbol may represent the 'Shadoof' or dipping well, and 'lifts' for irrigating gardens. (16, 90, 93).
167	73	228	O.	A Cotton 'gin' (?). A long tapering plectrum-like object retained within a semi-circular bow, by two cords (?) crossing it. Good specimens of this obverse symbol are rare. (63, 66).
168	76	198	R.	The 'vesica piscis,' 'almond' or 'Lozenge of Mary' of the Roman cult. (30).
169	82	211	O.	A 'Gilgal' or 'pillar.' An emblem of Mahadev. (64).
170	83	110	R.	A square within a circular area. (42).
171	85	125	R.	A trapezoidal area, or narrow truncated pyramid or chamber, blocked by four cubes reposing irregularly on one another. (42). W.E., Pl. VII, fig. 9.
172	86	201	O.	A horse-shoe shaped figure with 'Thyrsi' outside it. Three are seen on one side of it, but the complete number is not discernible. (90).
173	...	...	O.	A sphere to the left of a 'Taurine' in an oval area. Thomas J. As. Soc. Ben. 1865, Pl. IX, fig. 2.
174	87	205	R.	A square to the left of a trifid branch in triangular area. (19).
175	88	144	...	An eight-rayed star.
176	95	123	R.	A parallelogram divided down the middle and cut up into rayed triangular segments. (4).
177	...	...	R.	A W-shaped figure, a little opened out-made by the junction of two right angles. (48, 81, 109).
178	...	...	R.	A pyramid of three spheres, not enclosed in a circle. (116).
179	...	...	O.	Hare to right with ears shaped as a crescent. (46, 76).

180	...	...	R.	A sphere closely surrounded by a ring, which is bulged into three globes at three equi-distant points. (59).
181	...	...	O.	Three spheres partially fused together, and a thick curved* body resting on them. A.I., Pl. I, fig. 10. A specimen in my possession differs only in the end of the curved body being bent down to the right, whereas it is the end to the left, which appears slightly bent upwards in the Plate. (67, 77).*
182	...	...	R.	Central sphere surrounded by five crescents with cusps directed outwards, surrounded by ten beads, the whole in a circular area.
183	...	...	O.	Fox to right in a rectangular area. This is similar to No. 26, but without the fish below. A.I., Pl. I, fig. 1. If this animal is a fox, the tail must be curled round and so concealed from view, and the above figure supports this view. In my coin more of the tail is seen. (79).
184	...	...	B.	Symbol 165 with a sphere on the left.
185	...	...	R.	A 'Taurine' in an oval area. (83).
186	...	...	R.	An ear (?). (83).
187	...	...	O.R.	Four 'Taurines' ranged round a central sphere, with 'cusps' laid to the right. A.I., Pl. I, fig. 12. (O. 123, 127. R. 6). In this case, as others, the Rev. symbols are smaller than when placed on the Obv.
188	312	...	...	Symbol 118 only the 'cusps' of the 'Taurines' are directed in opposite directions.
189	239	162	O.	A square divided into four equal and similar parts. 21, 81).
190	106	111	O.	Four small squares within a square area.
191	...	...	R.	A 'Food-receptacle,' but without any visible remains of 'Taurines' (see No. 148). (116).
192	164	109	R.	A square in a square area.
193	109	116	R.	A square within a square.
194	158	117	O.	Crossed lines in a circle.
195	123	113	R.	Four dots in a square, with some obscure object above. A variant of No. 68.
196	...	...	R.	A 'Triskelis' revolving to the right. Rodger's Catalogue of Coins of the Indian Museum, Part III, Pl. I, No. 10014. (122).
197	178	180	...	A staff surmounted by a 'Taurine' on a cross-bar with the 'cusps' pointing to left. On the left of staff a 'Taurine' and on right a 'Taurine' with a lozenge on its left. B.M.
198	190	189	...	A square with a median down stroke from top to centre.
199	186	152	...	A 'Vesica piscis' in a square. B.M.
200	240	171	...	Four balls lozenge-wise. B.M.
201	242	101	...	A spear-head in a lenticular area.
202	283		R.	Two circles with a central dot, connected by a T. piece, in an oval area. (9).
203	92	210	...	A very enigmatical symbol on a coin in the possession of Dr. Codrington.
204	94	83	O.	Perhaps intended for a group of Cypress trees in a walled garden. (121).

* (67, 77, both coins of rude execution).

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205	101	154	O.	Three dots within a ring. A.I., Pl. I, fig. 4. This is a variant of 67.
206	111	88	R.	A doubtful object.
207	117	227	R.	A 'Five-fold square' with dot in the centre. This is the right-hand figure of A.I., Pl. II, fig. 16, composed of a square, with a square erected on each of its sides.
208	119	212	...	A curved ornament.
209	120	112	O.	A square divided into nine segments with a dot in the centre.
210	126	151	O.	An eight-pointed star within a circle surrounded by eight 'Taurines' with their cusps directed to right.
211	127	142	R.	Wheel and bells (?). An eight-spoked wheel with eight bells fixed on the periphery. N.O. fifth figure on the eighth line. (f. 11).
212	128	202	R.	Two shields (like the caps of the Dioskkuroi on Bactrian coins) in a rectangular area.
213	131	200	O.	Five dots ranged round the end of some oval object. Imprint of a foot (?).
214	134	145	O.	A circle surrounded by eight short rays, or spokes.
215	135	208	O.	Obscure object within a tripartite area.
216	136	146	R.	Sphere, surrounded by six short rays or spokes (22).
217	137	203	R.	A K-shaped mark to the left of a trident in a rectangular area.
218	149	155	...	Seven spheres within a hexagon.
219	141	81	R.	Fish sheltering under a 'Taurine' to right of a water plant.
220	153	199	O.	The 'Vesica piscis' surrounded by fourteen dots. A.C.
221	157	104	O.	A four-spoked wheel surrounded by six 'owl-heads.' A.C.
222	163	193	...	A Triangle. A.C.
223	165	191	...	A 'Trisul' supported on a pentagonal stand on two legs. In this symbol Mr. Sewell would no doubt recognise a relationship to the sacred beetle. In his fig. 11 (Roy. As. Soc. Journal 1886, p. 398), the body of the beetle is more or less pentagonal, while the middle pair of legs is very short. If we consider this middle pair omitted, the symbol includes the conventional elements of the beetle, *i.e.*, two forelegs, with a rostrum between, two hind legs whereon the symbol rests, and a pentagonal body in the middle. A.C.
224	168	204	...	A symbol composed of cramped angular lines and marks. A.C.
225	172	195	...	The mystic symbol of Delphi. B.M.
226	177	114	...	A curved mark within a square. B.M.
227	171	124	...	Six spheres within a parallelogram. B.M.
228	189	157	...	Seven spheres within a ring. B.M.
229	198	137	...	A wheel with three short spokes. A.C.
230	212	217	...	Dots between two upright lines. A.C. Can this symbol be intended to represent the "pipe" well of a Stupa? (See note by V. A. Smith, Jour. As. Soc. 1898, p. 579).
231	247	224	...	A lozenge of four circles each with a central dot.
232	249	226	...	Three spheres in line within an oval area. B.M.
233	254	...	R.	A square between two spheres in an oval area. (9).

234	255	...	...	Three spheres in a square area. A variant of No. 67.
235	257	...	...	Wheel above a tree.
236	142 280	71	O.	A Cactus-like plant (?) surrounded by numerous pear-shaped bodies and trified branches. A.I., Pl. I, fig. 6. (9).
237	285	...	...	Sphere with a 'Taurine' on the right, in a rectangular area.
238	...	...	...	A character like the Greek 'psi' and on the right an upright stroke with a sloping stroke on each side.
239	291	...	...	A tree with three trified branches and a square railing of four divisions below.
240	292	...	R.	A sphere between two 'Taurines.'
241	...	...	...	A rectangular upright base supporting a cross with some object above and two Taurines on the left. (there are two more on right not seen). A.I., Pl. I, fig. 12.
242	300	...	R	A wheel of six spokes.
243	301	...	R.	Seven rhomboidal hexagons arranged round a central sphere. (22).
244	...	...	R.	A sphere with an arch above. (9).
245	303	...	...	A sphere with a 'Taurine' on either side and a pair of opposed 'Taurines' above and below. This is a variant of No 94.
246	304	...	...	Symbol No. 96 (of Mahadev), conjoined with a 'Taurine.'
247	...	...	R.	Altar of Mahadev. An upright stroke standing on a horizontal one and crossed by a shorter. (28). This is a rare symbol on these coins, though very common on the coins of Madura. See Tufnell's Coin Collectors' Manual, Pl. II, fig. 16. In the Madura coins, however, the upper transverse bar is longer than the lower, which is not the case on the silver Karshapanas.
248	306	...	O.	No. 70, with a 'Triskelis' between the Chattras. (30).
249	308	...	R.	A spear head with open centre, surrounded by fourteen dots. (67).
250	309	...	R.	A central sphere with one below and two above, all three equidistant, a crescent over all and the whole within a mushroom-shaped area. (67). The original description given of 309 is not correct.
251	...	...	...	A parallelogram with a central sphere surrounded by four 'Taurines.'
252	...	...	O.	A Drum-shaped body with concave sides and a handle below, with two 'Taurines' on either side. (58, 116). Mr. Blackett has a third specimen. This can only be intended I think for a 'Praying wheel' but none of the coins display the upper part of the symbol.
253	147	65	O.	A Tree with three spatulate side branches and a terminal spike. A.I., Pl. I, fig. 1.
254	99	64	O.	A Tree similar to the last only with four side branches and a multifid apex. A.I., Pl. I, fig. 8.
255	70	74	O.	Tree and railing, three spatulate side branches and enlarged apex. (118).
256	71	68	O.	Tree with six lateral branches and a terminal spike all similar. (30).

257	72	70	O.	A narrow branch. A.I., Pl. I, fig. 4.
258	78	73	O.	Trees in a box with right side higher than the left. J. As. Soc. Ben. 1865, Pl. IX, fig. 7. (24, 36, 41).
259	79	80	R.	A bottle-shaped tree. (69).
260	...	...	O.	A Tree with four spatulate branches and a similar apex and probably a railing below. (60).
261	80	82	R.	Five-leaved branch in a lenticular area. (73).
262	81	85	R.	A branch in a circular area.
263	89	86	O.	A Trifid branch on the left of a bifid stem, with a free stroke on either side of it in a rounded area. This may be only half the symbol, in which case the above 'stem' is really only a branch. (97).
264	90	79	R.	A small tree with a square base of four divisions. (120).
265	182	75	...	A small tree of the type of 256, but with a square base. N.O. the last figure on the eleventh line.
266	183	67	...	A branch with nine leaves on a triangular shield or area. B.M.
267	200	66	...	A Tree; differs from 255 in having no apical leaf.
268	245	222	O.	A Tree with four trifid branches and a trifid apex. A railing below supporting two 'Taurines.'
269	296	...	O.	A branching plant, perhaps intended for a Euphorbia, so conspicuous an object in the hot valley of the Sutlej. (89).
270	...	...	O.	A very unintelligible object, resembling nothing so much as a leaf of a 'Cactus' or 'prickly pear,' only the 'Cacti' are wholly American (as botanists tell us) and therefore unknown in India in early times. I possess two coins with this symbol and a third is figured in the catalogue of the coins in the Indian Museum, Part III, Pl. II, No. 10014. It might have been intended for a proligerous leaf of Cotyledon rhizophylla. Roxb. if it, or any allied species was known then in India; but better specimens may clear up the mystery. In one of my coins there is the appearance of a 'Taurine' forming part of the symbol.
271	...	...	O.	Variant of 268 with the apex single not trifid. (114).
272	...	...	O.	Three (or more) spiny 'trifid branches in a circular area. (7, 78, the last is a copper plated coin).
273	...	...	R.	A shamrock-like branch and stem. A.I, Pl. II, fig. 1. (10).
274	...	...	R.	A two-handled water vessel. This symbol is shaped like the Portland Vase only the lip or handle on either side is curved over till it touches the shoulder, and instead of the mouth forming a straight line at top, the centre is depressed and the outline is made of two semi-circles. In the centre of the vase is a circular ornament (?), and the whole is within a neat barrel-shaped area. (22).
275	...	...	R.	Small twelve-spoked wheel. (28).
276	...	...	R.	A double row of eight rectangular cells ranged in a narrow oval area. (28).
277	...	...	R.	Variant of No. 108; each of the four crescents having a central prong, converting it into a 'trisul.' (35, 90).
278	...	...	R.	A five-pronged fork or rake, with a short handle and an X. mark (which can hardly be meant for a 'Taurine' by the side. (43).

279	...	...	R.	Three spheres, united into a cluster by three short stalks, (54). This symbol is really compounded of three Numbers 165 symmetrically united.
280	...	...	O.	Spear-head between 'Taurines,' N.O., the last three figures on the penultimate line. These figures suspiciously resemble No. 252 of the present paper, but if correctly drawn they must be different as there is no trace of a spear-head on the coins examined by me, but the support is distinctly a handle.
281	...	...	O.	Three 'Thyrsi' standing on a rectangular base. (62).
282	...	...	R. (?)	A sphere in an incused area, bounded by three segments of circles, concave exteriorly and with a small crescent within the cusps of each segment. (67).
283	...	...	R. (?)	Six equal and similar spheres round a central one, in a circular area. (67).
284	...	...	O.	Some branched object. (Unsymmetrical) with two 'Taurines' below. (70).
285	...	...	O.	A spear-head (?) with open centre, resting on an inverted crescent for a base. (74).
286	...	...	R.	An irregular pentagon in a square incused area. (73). A small punchmark.
287	...	...	R.	A central sphere surrounded by five crescents with five dots between the 'cusps' which point outwards, and five intervening dots as well, the whole in a circular area. (77). The coin is one of rude fabric.
288	...	...	R.	Two upright branches, the left-hand one regularly, the right-hand one irregularly trifid, in a trapezoidal area. (79).
289	...	...	R.	A bent, unsymmetrical branch in an oval area. (80).
290	124	4	R.	May be intended for a rude human figure. (80).
291	...	...	R.	'Taurine' in an oval area. (83, 100).
292	...	...	R.	Lingum-yoni and crescent attached. (83).
293	...	...	...	Two parallel strokes each in a lenticular area, which areas coalesce at the side. On a coin the property of Mr. Blackett.
294	...	...	R.	A central 'Thyrsos' carrying two transverse bars, each supporting a short thyrsiform object on either side of the central support; the whole in a tall triangular area. (108).
295	...	...	O.	Tree like No. 253 but with spatulate apex. (118).
296	...	...	R.	'Taurine' with straight 'cusps.' N.O., tenth figure on last line.
297	...	...	R.	Four symbols No. 296, the eight straight 'cusps' forming spokes of a wheel, in a circular area. (135).
298	...	...	R.	A variant of No. 126, the terminal elements of which present the usual form of a fish with a pair of lateral fins on either side. (136).
299	...	...	O.	A moneyer's hammer between two 'Taurines,' W.E., Pl. VIII, figs. 19 and 27. This is the implement termed a "plough" by Thomas. N.O., fig. 9.
300	...	...	O.	A five-pronged harrow. The prongs are round above and with three points below. W.E., Pl. VIII, fig. 27.

301	...	...	O.	A tree evidently some sort of palm, with a head of five elongated spikes separated by four globular fruits. W.E., Pl. VII, figs. 13 and 18. I suspect this is a conventional mode of representing a cocoa-nut palm. (Cocos nucifera).
302	...	...	O.	A tree with a tall railing at the base, perhaps the sacred Sâl tree (Shorea). W.E., Pl. VII, fig. 9.
303	...	...	R.	A ring surrounded by eight very short spokes, and a ninth rather longer, like a handle. (88).
304	...	...	O.	An elephant goad. A pointed implement with a sharply recurved hook on the left. A small symbol. (88).
305	...	...	O.	Variant of No. 81, but appears to have seven Chattras instead of six. A.I., Pl. I, fig. 2.
306	...	...	R.	A bushy tree in a tall oval area with a flat base. (58).
307	.	...	O.	A variant of No. 25, with a 'Taurine' behind the dog. W.E., Pl. VII, fig. 16.
308	...	...	O.	A six-spoked wheel. W.E., Pl. VII, fig. 23.
309	...	.	O.	A wheel with eight-pointed spokes within a periphery or ring supporting three 'Chattras' and three 'Taurines' in ovals alternately. W.E., Pl. VIII, fig. 24.
310	231	...	...	The figure on the Plate is not referred to in the text and the symbol numbered 231 is now described under the present number. It is a variant of a 'Taurine' with cusps opened out. W.E., Pl. VIII, fig. 20, (?) though in the figure one 'cusp' is missing.
311	...	...	O.	A 'food receptacle' with 'loops' to the left. This is united with Symbol No. 90, on its right on coin 56.
312	...	...	O.	A trefoil leaf. W.E., Pl. VIII, fig. 23.
313	...	...	O.	A food receptacle with loops to the right with symbol No. 90, on its right. E. J. Rapson, Journal Roy. As. Soc. 1895, fig. 33. This symbol is on a round coin; No. 311, on a square one.
314	...	...	O.	Goat as in No. 19, but the object over the goat's back seems rather intended for a 'bell' than a cup. It conveys the idea of being composed of two pieces of wood, with a loop for suspension round the goat's neck, just the sort of 'bell' made of two wooden 'clappers' which serve to indicate the whereabouts of the animal, browsing in the jungle. This coin belongs to Dr. Codrington.
315	...	...	O.	A dog. W.E., Pl. II, fig. 26. In this figure the animal seems to occupy the whole of the 'punch' without any room for a 'stupa.'
316	...	...	O.	No. 70 with three symbols No. 85 between the 'Chattras.' B.M.
317	...	...	O.	Central sphere surrounded by three fish radiately arranged. B.M.
318	...	...	O.	A star formed by a broad ring, with four tapering arms, about the ring's diameter in length. B.M.
319	...	...	O.	No. 257 only with more numerous leaflets. B.M.
320	...	...	O.	A small ring with a trefoil ornament above in an oval area. B.M.
321	...	...	O.	A central sphere with four short arms, each ending in a sphere, with four other spheres in the inter-

				spaces. This is a variant of the Ujain symbol, forming a 'nine-balled chakra." B.M. '(Grant 336).'
322	...	...	O.	No. 70 with a 'rosette' of one central and six surrounding spheres between the 'Chattras,' within a circular area, enclosed within a square, with a fish in each corner. B.M.
323	...	...	O.	An eight-rayed star in a ring, surrounded by three 'Chattras' and three 'Taurines.' N.G., VIII, fig. 24
324	...	...	R.	A trefoil branch with three pointed lobes. N.G., VIII, fig. 23.
325	...	...	O.	A star with six blunt thick rays or spokes. N.G., VIII, fig. 23.
326	187	78	O.	An antelope, on the alert, with tail erect, standing. above a crescent. The animal has straight horns; the ears are out-stretched as though intently listening; the tail is erect, as when those animals are alarmed. The straight horns and short 'scut' sufficiently indicate this animal as an Antelope. T.P., VII, fig. 1.
327	...	...	O.	A crescent surrounded by five 'Taurines.'
328	...	...	O.	Var. of No. 83, with Taurines and Lamps in ovals.
329	...	...	O.	Var. of No. 43, square, within 4 Taurines, with 'cusps' to left.
330	...	...	O.	Stupa with Taurines and Lamps.
331	...	...	O.	A rake or harrow with 3 prongs.
332	...	...	O.	Var. of No. 73, ovals being replaced by Shields.
333	...	...	R.	Var. of No. 63, with a cross-stroke.
334	...	...	R.	Y-shaped symbol.
335	...	...	O.	Var. of No. 83, with Triskelis revolving to left, in place of Lamps.
336	...	...	O.	Tree with 5 acuminate branches, on a 4-railed base and one cross rail.
337	...	...	R.	Central sphere surrounded by 4 tricuspid Crescents. This and the last are vars. of No. 126.
338	...	..	R.	Central sphere, with lateral Crescents and tricuspid ends.
339	...	...	O.	Ladder-like symbol, perhaps representing the corridor cells of a monastory.
340	...	...	O.	An extraordinary symbol, probably meant for a big-headed soldier ant. The die is half an inch long nearly and unsymmetrical. Above (or in front) is an oblong body broader than long, with a small median projection and to the right of it two curved lines, or mandibular organs. On the left there is no room on the die for the pair on that side, and four other dies are also all similarly unsymmetrical. Behind the head (if I may call it so), and connected with it by a narrow neck is a pointed oval body with 3 strokes pointing backwards, as though intended for legs. It is a peculiarity of this coin that all 5 dies are sharply cut and unsymmetrical and all in good state; they are moreover all new but unintelligible.
341	...	...	O.	Two Taurines not quite on a level, with perhaps a bovine head, facing, above.
342	...	...	O.	Var. of No. 79, the central sphere being replaced by a hexagon with the symbols resting on each external angle.

POSTCRIPT.

At page 266 of my former paper I mentioned the 'Swastika' as a symbol found on the silver 'Karshapanas.' This is an error into which I fell by accepting the authority of Thomas, who figures it in his plate of symbols N.O. on the last line, and without considering that Thomas made no distinction between the symbols of the silver Karshapanas, and those impressed on the copper coins of a distinctly different monetary value. It is tolerably certain that the 'Puranas' were a silver currency only; the few specimens known in copper having been made with the intention of plating them with silver. This is proved by the majority of such pieces still retaining traces of the silver which once covered them. How this was effected I cannot say, but the process was most dexterously carried out and the result a most perfect imitation of a silver coin. A specimen in my collection exemplifies this, as the thin covering of silver maintains the most perfect adhesion to the base metal, which shows through it by wear at different places. Neither was the process confined to these coins, as I have an excellent example of the same fraud in a hemi drachma of Menander; a Bull and Horseman coin of Sāmanta Deva of Kabul, and two Indo-Sassanian coins of different types. The weight of these spurious copper 'Puranas' is about 45 grains, and as the silver could hardly have weighed less than ten grains, the coin when new, would by its appearance and weight have disarmed suspicion. On three of these copper coins before me (which with a number of other coins were lent me for examination by Dr. Codrington) there occur the following symbols of the present list, and no symbol whatever not found habitually on the silver coins; Nos. 12, 15, 72, 85, 99, 126, 140, 163, 164; but it is their light weight when worn which betrays their real character.

SYMBOLS ON OTHER SILVER COINS THAN THE 'KARSHAPANAS' OR 'PURANAS' PROPER, WHETHER STRUCK WITH 'PUNCHES' OR ORDINARY DIES.

It may be as well to notice here some symbols and devices which though occurring on coins, in some cases of an entirely different class from the 'Puranas' are yet related to the symbolism of the better known and earlier issues. The coins in question fall naturally into local groups from their 'findspots, Saharanpur, Mathura, Wai, and the Konkan.' The Saharanpur coins of the 'Kunindas,' are described in "The Coins of Ancient India," page 70, and the silver coin of the tribe supplies us with numerous symbols, some new, and some merely variants of forms met with on the early 'Puranas.'

SAHARANPUR COINS.

1	O.	A Buffalo. This animal occupies the centre of the obverse, and (as already remarked) has always been incorrectly described as a Deer. In some coins the ear is distinctly seen A.I., IV, fig. 2, while in others it is omitted.
2	O.	A female figure with the head turned towards the Buffalo, and in some cases displaying the hair done up into a prodigious 'bun' at the back of the head, as seen in No. 1, symbol of this paper, on the 'Puranas.' This figure is clad in trousers, baggy above and tight below, such as are worn by women in the Punjaub at the present day.
3	O.	A pair of Cobras, erect on their tails and facing each other. A.I., V, figs. 1 and 2. A variant of this symbol is seen on the coins of the Odumbaras, A.I., IV, fig. 14. It was these snakes which betrayed Mr. Thomas into the strange mistake of describing the animal above which they occur, as a deer with curiously twisted horns! On all well-preserved coins, however, whether silver or copper, there is no connection between the snakes, and the head of the animal above which they occur. This assertion is verified by Pl. XIX, of Thomas's Prinsep's Indian Antiquities and Pl. XLIV, figs. 2, 3, 4, 5, 7 and 8. Not only do these figures support this view, but figs. 9 and 10 of the same plate absolutely refute the notion of their being horns, by displaying the crescentic bubaline horns as usual, but without the Cobra emblem above. It is strange the well-known sacred emblem of a pair of snakes never seems to have occurred to any of the describers of this coin, some of whom must probably have been familiar with the lines of the poet. "Pinge duos angues, pueri, sacer est locus, extra Mejite." Persius. Sat. I, 113. "Paint up two snakes; the spot, boys, is sacred, and if you "want to commit a nuisance, you must go outside." Sir A. Cunningham (A.I., V., figs. 1 and 2, p. 72) contents himself with styling these snakes "a Buddhist symbol," without being more explicit, or in any way alluding to the mistakes of previous describers. The symbol also occurs by itself on the reverse of a coin figured by Thomas. (T.P., XIX, fig. 6) so that it is difficult to understand how the real significance of the symbol came to be se overlooked.
4	O.	A variously shaped emblem on a sort of handle in the woman's right hand; either a cruciform objectwith three dots (A.I., V, fig. 1), or a flower (A.I., V, fig. 2). The first is a symbol commonly carried by Vishnu, on later coins; see Sir W. Elliot, N.O., Pl. III, fig. 105.
5	O.	A square figure supporting a T. In some coins, probably from inferior execution, the figure is rather trapezoidal than square.
6	O.	A 'Stupa' of three chambers supporting a T. This T. is of course a later variant of the 'Chattra' (No. 70). This symbol is placed below the belly of the buffalo but is omitted on some coins.
8	R.	A six chambered 'Stupa' surmounted by a T. A.I., V, fig. 1.
9	R.	A 'Triratna' above the last.
10	R.	A tree, on the right of the 'Stupa,' with three tiers of horizontal branches, with a railing below. This tree is in all probability intended to represent the Deodar of the adjoining hills, though in a very conventional manner.
11	R.	Below the 'Stupa' is a line, which is usually regarded as a snake. The line is sometimes very zig-zag, and in some later coins is seen duplicated in which case the rippling of water is what is

		probably meant. On these coins however a snake is the object intended, and on a copper coin of my own (486) the snake is made to enter the 'Stupa' above, just as the stalk enters a leaf.
12	R.	On the left of the 'Stupa' the 'Swastika' occurs, with the arms bent to the right.
13	R.	Below the 'Swastika' is a 'food-altar' of which three forms are seen on these coins. The most usual is that of a flower-pot, supported on a short stem. T.P., XIX, fig. 16, which stem is often exchanged for a long pole, fig. 18 of the same plate. Another form with a bifid curved base is given in T.P., XLIV, fig. 4, and A.I., V, figs. 1 and 2. This form of 'altar' consists of an X with a long cross-bar at the top and a shorter one at the intersection of the limbs of the X.

The chief innovation on these coins is the substitution of a T. for a Chattra (No. 70) and the curved stem of the Food altar or receptacle (No. 148).

With regard to my identification of No. 10 with the Deodar, a few words may be said. The same type of tree occurs on some of the coins of the Yaudheyas, A I., VI, fig. 9, where it is described (p. 78), as the "Bodhi tree." Now my reason for the above identification is that the peculiar horizontal branches spreading out from the trunk, very faithfully convey the idea of the Himalayan Cedar, rather than any other tree, though in a conventional manner. It was moreover a tree which must have been familiar to the inhabitants of the districts bordering the Sutlej, many of whom must have entered the hills for business or devotional purposes and have been struck with the noble trees of that species which covered the hills; the importance moreover attaching to the tree is proved by one of the names of Siva, being 'Kedāreçvara' or 'Lord of Cedars.'

According to Sir Emerson Tennent, the 'Bodhi tree' of Ceylon was the 'Pipal' (Ficus religiosa) which is not among those capable of identification on the coins. On the coins of the 'Audumbaras' two perfectly distinct trees are identified by Sir A. Cunningham as the Audumbara Fig tree (Ficus glomerata), namely, A.I., IV, figs. 1 and 2 and No. 255 of this paper. It would seem therefore that Sir A. Cunningham applied the term 'Bodhi tree' indiscriminately to any tree depicted on a Buddhist coin, and this raises the question whether any attempt was made on the coins to represent any particular species of tree. Now without wishing to imply that every type of tree represented on the coins was intended to represent a separate species, still I think a limited number of trees may be identified both on the coins and Sculptures. First comes the Deodar on the coins of the Kunindas and Yaudheyas. Then the Vine is easily to be

recognised on the copper coins of Taxila. A.I., XI, fig. 9, where vine tendrils and grape clusters form the bottom line of symbols on the coin. If the vine occurs on the 'Puranas' (as I believe to be the case) it is in the highly conventional form of grapes adhering to an upright stem; this attribution is largely helped out by the presence of a goat, and by the fact that there is no other fruit which can be suggested with greater probability. The cocoa-nut palm may or may not be intended by symbol No. 301; one argument in favour thereof being, that the symbol seems unknown on coins from the Punjaub, and is restricted to coins from Southern India, that palm being only found on the sea coast. The Mango (Magnifera indica) is not represented on the coins, but is clearly seen on the sculptures of Barhut Stupa (A.I., Frontispiece).

MATHURA COINS.

		The symbols on some silver coins from the Mathura district were described by me in the Journal As. Soc. of Bengal for 1894, Part I, No. 2, to which I have now added three additional from coins in the B.M.
14	O.	A nine-pin like object, with rays above, directed backwards, or to the left. (2087).
15	O.	An object perhaps intended to represent a horse to r. (2099). Both these symbols are too obscure to enable any positive opinion to be expressed as to their import.
16	O.	A small 'Triskelis' revolving from r. to l. (2093).
17	O.	An object which may be a rude plough. (2092).
18	O.	A 'Taurine.' (2095).
19	O.	A Confused symbol, perhaps Nos. 14 and 15 united.
20	O.	Some semi-circles, perhaps parts of a 'Stupa.'
21	O.	A small sun (on one coin) is struck over the rump of No. 15.
22	R.	A variant of the 'Thunderbolt.' Two tricuspid 'Taurines,' that is with additional median prong, and two lateral crescents.
23	O.	A fish to r. in an oval area, with three fins above and three below. B.M.
24	O.	A hunting leopard or 'Cheetah' (Cynaclurus jubata). On one coin there is a feline animal with a long tail, which I identify with the domesticated 'Cheetah.' It has nothing to do with the 'Leopard' of Thomas, which I have failed to recognise on any silver coin. B.M.
25	O.	Four dots in a square area, with one in the centre. B.M.
26	O.	Four dots below and one at the top in a Scutiform area pointed above. B.M.
		WAI COINS.
...	...	The wai coins are of an entirely different class and have been described and figured by Dr. O. Codrington in the Journal of the Royal Asiatic Society, Bombay Branch. Vol. XII, p. 400. They have also been figured by Sir W. Elliot in N.O., Plate 11, figs. 62, 63 and 64. They are of three sizes representing two

		Karsha, Karsha and half-Karsha pieces, but there are few symbols on them.
27	O.	A variant of the 'Taurine' in Dr. Codrington's opinion, fig. 64: the right hand figure.
28	O.	A quadrefoil object; fig. 64; the left hand figures.
29	O.	A curious symbol which may be described as a sphere within a ring, from which two small spheres are suspended, each by two lines or bands. The Reverse of all is blank.
		COINS FROM THE KONKAN.
...	...	The silver coins figured on the same plate as the above by Sir W. Elliot (fig. 61) are of an entirely different type and as they weigh only a trifle over fourteen grains, are quarter-Karsha pieces. I have described some of them in the Jour. As. Soc. Bengal for 1894, Part I, No. 2, from which I now extract the following symbols.
30	O.	A twelve-rayed sun, the rays being long and equal to the radius of the disk, whence they issue as sharply tapering rays. This symbol only occurs on one of my coins (2103), and seems to have been cut on the same die as the other symbols, which intentionally seem to overlie it; if this is not so, it is the older impression.
31	O.	A humped Bull, walking to the l., the horns forming a crescent on the top of the head. Beneath the Bull is a solid square mound, or 'chabutra,' and below it an oblong object representing a tank twice as long as broad, and not quite as broad as the square above.
32	O.	A small 'Triskelis' revolving to the l., over the Bull's rump.
33	O.	An upright Staff in front of the Bull.
34	O.	On either side of the 'chabutra' (on some coins) is a 'Taurine' laid horizontally, with the cusps directed from it. (2102).
35	O.	Behind the 'Triskelis' on the right is a small 'Swastika,' revolving to the left.
36	O.	Between the 'Swastika' and the 'Taurine' on some coins is a small lined square.
37	O.	On the left of the Triskelis is a dot in a circle. (2103).
38	R.	A variant of No. 126 formed of four tricuspid 'Taurines,' that is each, Taurine has a median prong between the 'cusps' with four dots between the 'Taurines.' N.O., 11, fig. 61, figured by Sir W. Elliot. (2102).
39	R.	A rude 'Stupa' of three tiers, with a crescent above and a Taurine at the side.
40	R.	Some branching, cactus-like plant.
41	R.	A Hare within a circle, round which are some letters, one of which resembles the Gandharian 'ri.' (Dr. Codrington).

INDEX OF THE MORE IMPORTANT SYMBOLS.

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On the symbols and devices met with on Copper Coins of Ancient India, both those cast in moulds and those struck with dies, from Taxila, Ujain, Eran, Benares and other contemporary Mints.—*By* W. Theobald, M.N.S., *London.*

[Read December, 1889.]

The unit of the most ancient copper currency in India, was the Pana of 144 grains with its divisions and multiples as below. (Coins of Ancient India, p. 59).

NAMES, VALUE, AND WEIGHT OF THE COPPER COINS OF ANCIENT INDIA.

Panas.	Kakinis.	Cowries.	Grains.
$\frac{1}{40}$ (*a*)		2	4·5
$\frac{1}{20}$		4	9·0
$\frac{1}{8}$	$\frac{1}{2}$ Kakini	8	18·0
$\frac{1}{4}$	1 ,,	16	36·0
$\frac{1}{2}$	2 ,,	32	72·0
$\frac{3}{4}$ (*b*)	3 ,,	48	108·0
1	4 ,,	64	144·0
$1\frac{1}{4}$	5 ,,	80	180·0
$1\frac{1}{2}$	6 ,,	96	216·0
$1\frac{3}{4}$	7 ,,	112	252·0
2	8 ,,	128	288·0
$2\frac{1}{2}$ (*c*)	10 ,,	160	360·0

(*a*) The two-cowrie piece was described by me in the Jour. As. Soc. Bengal for 1891. The three-quarter of a Pana piece (*b*) is not mentioned by Sir A. Cunningham, but I have a piece (3288) identical in type with fig. 9, Pl. II, Coins of Ancient India, and which weighs 104 grains, and must therefore be a three-quarters of a Pana. A large copper piece of Eran, (*c*) in the possession of Mr. Blackett weighs 347 grains, which is sufficiently close to the theoretical weight of 360 grains to show that it represents two and a half Panas. This, the owner has kindly allowed me to describe.

Copper, square, cut from a ribbon seven-eighths of an inch broad, and a trifle more than an eighth in thickness. Weight 347 grains, showing a deficiency of but thirteen grains from the theoretical weight of a two-and-a-half Pana piece. The coin is of neat execution and but slightly worn. On the Obverse are five symbols, separately impressed with a punch.

(*a*) A 'Stupa' of three chambers with a crescent above.

(*b*) A sixteen-petalled lotus flower, Jour. As. Soc. Ben., Vol. VII, Pl. LXI, fig. 5, where this emblem is borne on the head of a staff in a man's hand, on a round coin of Ujain, and it also occurs on a square coin of Eran now in the B.M. from the Cunningham collection.

(*c*) A central sphere supporting three 'Chattras' and three 'Taurines.'

(*d*) Two similar symbols of doubtful meaning, within an oval area. This symbol may be a variant of the 'vine' as seen on the coins of Taxila (A.I., II, fig. 9) on which the curling tendrils and clusters of grapes can be easily made out. In the present coin this is not the case but the symbol may have been unintelligently copied by the artist from an imperfect example of the Taxila coin.

(*e*) The last symbol is only partially preserved, and would seem to be an extreme variant of the 'triskelis' of a novel character. It consists of a central boss and ring round it, outside of which are three elongate curved bodies, the tapering end or head directed to the left, whilst the other end is abruptly truncate or hamate and bent upwards and backwards as though to represent the tail of a fish. If this idea is correct the symbol probably represents three dolphins, as seen on many Greek coins.

These five symbols are all that can be made out on the Obverse. On the Reverse are—

(*f*) An hour-glass-shaped body not quite equally divided into an upper and lower portion, the latter being slightly the larger and terminating below in a short median and symmetrical stem.

(*g*) Immediately below is a remarkable figure, which may be described as the segment of a wheel, pendant from a ring surrounding a small central opening. The segment is nearly the quarter of a circle; the spokes are four in number and separated by three triangular interspaces. The symbol recalls one of the Egyptian emblems of Deity, known as the 'Tail of the Sacred Vulture,' wherein is embodied the

Assyrian conception of the Male Triad united to the Monogynous Mother.

(*h*) At one corner is a portion of a sixteen-petalled Lotus.

(*i*) A hook-shaped mark counter-struck over the lotus seems to represent a portion of some other symbol of which no more now remains.

There is little doubt that if private collections were searched many more coins of this sort would be discovered, and new symbols added to the following list, which must therefore be considered as a first attempt only to enumerate the symbols on the early copper coins, as differentiated from those found on silver pieces.

The materials whereon the following results are based are 1st. The collection of coins in the British Museum, wherein is now deposited the cabinet of Sir A. Cunningham, as well as those of earlier collectors, Colonel Stacey, Major Hay, Dr. Swiney, Messrs. Masson, Grant, Thomas, the old India House collection, and others. 2nd. A small collection of my own. 3rd. A small collection lent me for examination by Dr. O. Codrington, partly his own and partly belonging to the Royal Asiatic Society. The following books have also been searched for figures of coins:—Wilson's Ariana Antiqua, Sir Walter Elliot's 'Numismatic Gleanings' in the Madras Journal of Literature and Science for 1858, Prinsep's 'Indian Antiquities,' edited by Edward Thomas, 'Ancient Indian Weights,' by Thomas in Numismata Orientalia, The 'Journal of the Asiatic Society of Bengal,' 'Catalogue of the Coins of the Indian Museum,' by C. J. Rodgers, 'The Coins of Southern India,' by Sir Walter Elliot in Numismata Orientalia and last but not least the 'Coins of Ancient India,' by Sir A. Cunningham.

The following abbreviations are used:—

A.A. Professor Wilson's Ariana Antiqua.

N.O. Ancient Indian weights by E. Thomas, in Numismata Orientalia.

T. P. James Prinsep, edited by Thomas.

E.N.O. Sir Walter Elliot's Coins of Southern India, in Numismata Orientalia.

N.G. Elliot's Numismatic Gleanings. Madras Journal of Literature and Science, 1857-8.

J.B. Journal of the Asiatic Society of Bengal.

A.I. Coins of Ancient India by Sir A. Cunningham.

A.C. & *B.M.* Collection of Sir A. Cunningham and the British Museum respectively.

C.I.M. Catalogue of the Coins of the Indian Museum.

O. & *R.* Obverse and Reverse. *S.* Square Coin.

The first column contains the number of the symbol in the present list; the second column the number corresponding with the numbers and figures of my previous paper on punch-marked symbols; the third column, states whether the symbol is on the Obverse or Reverse.

As the verbal description of a symbol can never give so clear an idea of it, as a figure, I have as a rule given a reference to where the symbol has been figured, when such has been the case, and for convenience of reference have endeavoured to group the symbols together according to their character, adding the class of coins on which they occur.

FIGURES, MYTHOLOGICAL OR HUMAN.

1	...	...	O.	Head in profile of a Rakshas. (S) A.I., III, fig. 7. Taxila.
2	...	...	O.	Siva standing with Trisul and axe. A.I., V, fig. 4. Kunindas.
3	...	...	O.R.	Six-headed figure of Kartikeya. A.I., VI, fig. 11, p. 78.
4	...	...	O.	Kartikeya as above, with small bird on his shoulder. A.I., VI, fig. 12. This and the last are Yaudheya coins.
5	...	...	O.	A male figure standing, with staff in right hand with two cross-bars. A.I., VI, fig. 7. Yaudheyas.
6	...	...	O.	A female figure in front of a Buffalo. T.P., XLIV, fig. 7. The copper coins are of coarse execution, but on the silver coins the figure carries in the right hand either a lotus, A.I., V, fig. 2., or three balls on a short stem. A.I., V, fig. 1. Kunindas.
7	...	...	R.	A male figure with right hand extended and the left resting on the hip. A.I., VI, fig. 7. Yaudheyas.
8	...	...	R.	A female figure standing, with five dots over the head, perhaps Draupadi, as it is a Hindu coin. A.I., VI, fig. 12. Yaudheyas.
9	...	...	O.	A standing figure holding a flower. (S). A.I., II, fig. 17. Taxila.
10	...	...	O.	A standing figure with a Taurine below. A.I., II, fig. 17. Taxila.
11	...	...	R.	A female figure standing on a 'lotus' flower (so called) perhaps the Constellation 'Phalguni.' A.I., VII, fig. 5. J.B., XLIX, VIII, fig. 18. Mr. Carlleyle is undoubtedly wrong in attributing this female to 'Buddha.' J.B., XLIX, III, fig. 9, p. 26.
12	...	...	R.	A standing figure, overshadowed by a five-headed 'Nag.' A.I., VII, fig. 12. Cunningham suggests (l.c., p. 83), that this is 'Bhumi,' the personified Earth goddess; but against this is the fact that the figure appears to be a male. As Bhumi is on the coin legends, the figure may be perhaps intended for Prithi, whence Bhumi's patronymic 'Prithivi.' In milking the earth too for benefit of mankind Prithi holds among pastoral tribes a similar place of honour as intercessors with Bhumi to that of

				Demophoon, among cultivators in the Homeric hymn to Demeter; or in a word 'Prithi' really stands for Bhumi. Sometimes the 'Nag' has six heads instead of five. J.B., XLIX, VII, fig. 10. A similar figure on the coins of Agni Mitra may not improbably represent Agni. A.I., VII, fig. 13.
13	...	...	R.	A seated figure on a railed base, probably intended for Indra. A.I., VII, fig. 19.
14	...	...	R.	Figure within a shrine (Indra?) A.I., VII, fig. 20.
15	...	...	R.	A similar figure to the last, but with four arms, probably represents Vishnu. A.I., VII, fig. 21.
16	...	...	O.	A female full length figure counterstruck so as to obliterate the upper line of symbols on coins of Bhanu Mitra, Agni Mitra, and Surya Mitra. A.I., VII, fig. 8. J.B., XLIX, VII, figs. 2, 4, 5, 6.
17	...	...	R.	A seated female figure (inadvertently described in the text (p. 83) as standing). A.I., VII, fig. 11. These seven figures are all on coins of Panchana.
18	...	...	R.	Standing figure with snaky legs, probably Scythes the autochthonous ruler of Scythia. (S)., J.B., VII, LX, fig. 1. The description on p. 1053 contains no reference to the 'snaky legs.'
19	...	...	O.	A standing figure, with right hand upraised and holding up a snake. T.P., XLIV, fig. 23, and A.I., VIII, fig. 4, on satrap coins of Mathura.
20	...	...	R.	A seated female figure, lustrated by an Elephant on the left. If there was another elephant on the right it does not show in the plate. T.P., XXXI, fig. 21. The coin is described as of copper, silvered.
21	...	...	R.	A seated female lustrated by a pair of elephants. N.G., X, fig. 68.
...	...	...	O.	The same device occurs on coins of Eran. (S). A.I., XI, fig. 14, also on coins of Ujain. (S)., J.B., VII, LXI, fig. 3. In this figure a horse is figured in the left hand corner, but a duplicate specimen in the Cabinet of the Royal Asiatic Society enables me to express the strong conviction that the animal is really one of a pair of Elephants.
22	...	...	O.	A standing female figure lustrated by two Elephants. A.I., V, fig. 9. Kosambi. This figure is described in the text (p. 74) as the Goddess Lakshmi, and where the figure is seated, no doubt Lakshmi is intended, but on a Buddhist coin, the figure is far more likely to be intended for Queen Maya, who gave birth to Buddha standing, and was then according to the legend miraculously refreshed by two streams of water poured over her from heaven. The artist has represented this as performed by two celestial Elephants. I may here draw attention to a piece of sculpture from the 'Potowar,' figured in J.B., V, XX, p. 471. Here in addition to the two Elephants, two female attendants are standing near, each with a 'chatti' of water in her hand and it is noteworthy that a pair of humped Bulls cower beneath the Elephants in a wholly inferior position. The influence of Greek art has evidently not been lost with regard

				to the pose of the Elephant on the copper coins, as compared with the rude form the Elephants display on the silver 'Puranas,' which conventional forms entirely disappear on later mintages.
...	...	...	R.	The same design is seen on Satrap coins of Mathura. A.I., VIII, fig. 4.
23	...	...	R.	A standing female figure between two trees, with railings, the trees forming a canopy overhead. This figure is probably intended for Queen Maya about to give birth to Buddha. T.P., XX, fig. 49. A lead coin.
24	...	...	O.	A seated female figure with the right hand on the hip though the text describes it as 'held up' (p. 116). A.I., XIII, fig. 2.
25	...	...	O.	Raja seated with the right leg over the edge of the throne. A.I., XIII, fig. 3.
...	...	...	O.	Raja seated with right hand on knee. A.I., XIII, fig. 14.
...	...	...	O.	Raja seated, with right hand holding a flower. A.I., XIII, fig. 15. These four coins are from Nepal.
26	...	...	O.	Standing male figure holding a standard in his right hand. J.B., VII, LXI, fig. 5. Ujain.
27	...	...	O.	Standing figure with arms akimbo. Ujain. (491).
28	...	...	O.	Standing figure (Siva) with three heads. Ujain. (493). J.B., VII, LXI, fig. 26.
29	...	...	O.	A seated figure wish arms akimbo. J.B., VII, LXI, fig. 18. Ujain.
30	...	...	R.	A standing male figure, counterstruck on Reverse. J.B., VII, LXI, fig. 13. Ujain.
31	...	...	O.	A male and female figure both standing side by side. (S). Ujain. B.M.
32	91	5	O.	A plumed warrior to right, holding a club in left hand and a water-pot in the right. (S). Ujain. These coins average 22 grains, and on two of them two fish in a tank, facing each other, seem to form part of the die. They are in the Cabinet of the Royal Asiatic Society.
33	124	4	O.	A plumed warrior to right with a club in right hand and a water-pot in the left. A.I., X, fig. 3. Ujain. The plumed warrior is a 'punch' device and Ujain is one of the few mints which issued 'punch-marked' coins proper. The majority of Ujain coins are however die-struck, *e.g.*, all those figured on A.I., X, and the same may be said of Eran coins. A.I., XI.
34	...	...	O.	A plumed warrior to left, in an oval area. (S). The 'torso' of the figure is pretty distinct, but the narrow compass of the die leaves no room for the club or water-pot as in the previous figures. All these coins have the Benares or 'cotton-bale' symbol on the reverse, and average 36 grains, on some 80 coins. On one larger coin of 57 grains the figure is counterstruck over the figure of the Sun. Benares district.
35	...	...	O.	A human hand. J.B., VII, LXI, fig. 2. Ujain.
36	...	...	O.	A kneeling figure to left. J.B., VII, LXI, fig. 16. Ujain.

FIGURES OF ANIMALS.

The animals on the coins are not numerous. At the head of the list stands the Elephant, but not in the form represented on the silver 'Puranas.' After the Elephant comes the humped bull, the Lion, the Horse and the Buffalo. Among birds the Peacock and Cock and perhaps the 'whistling' teal or 'cotton' teal. Among reptiles the Cobra and a harmless snake or two; one or two species of river turtle and a frog, and among fish, the dolphin (on one coin perhaps) and two or three undefined species. Conspicuously absent on the copper coins are the dog, goat and civet-cat, so frequently seen on the silver 'Puranas;' also the monkey and crocodile; the former, as Honuman appearing on the later coinages of Southern India, while the Crocodile appears on some Pandhyan coins. E.N.O., IV, fig. 143. As regards the Horse the remarks of Sir W. Elliot seem to me to be not a little tinged with error and misleading. "The association of the horse with military operations has at all times, and in all countries caused it to be emblazoned as a distinguishing mark of warlike nations. Although not peculiar to the Buddhists, it was a favorite symbol, and occurs on many coins of the period of their ascendancy." (N.G., p. 246). The horse has of course always been regarded as emblematic of war. So Virgil makes Anchises exclaim when he sees horses grazing on the shore of Italy—

"Bellum, O terra hospita portas;
"Bello armantur equi, bellum hæc armenta minatur."
Æneid III, 539.

But it may be remarked that the 'horseman' so common on Greek and Scythian coins, is almost, if not wholly absent on Indian mintages of the class I am describing, and surely on a Buddhist coin, the horse would not be intended to convey or embody any warlike sentiment. On a Buddhist coin the reference would rather be to Siddhārtha's famous steed Kaṇṭhaka.

"Look! if I touch thy flank
"And cry, 'On Kantaka,' let whirlwinds lag
"Behind thy course! Be fire and air, my horse!
"To stead thy Lord; so shalt thou share with him
"The greatness of this deed which helps the world."
The Light of Asia. Book IV.

				THE ELEPHANT.
37	...	...	O.	Elephant to r. or l. with a 'stupa' over the rump. (S). A.I., III, figs. 1, 2 and 3. (S).
38	...	...	O.	Elephant, full front. A.I., III, fig. 5. (S). These are all Taxilacoins.

39	...	...	O.	Elephant to left. A.I., I, fig. 24. (S).
40	...	...	O.	Elephant to left over a 'food altar' laid horizontally. No. 214. (S). A.I., I, fig. 28. (S).
41	...	...	O.	Elephant to left, facing a 'food altar' No. 214. (S).
42	...	...	O.	Elephant to left with driver. A.I., I, fig. 24. (S). These are all cast coins from Northern India.
43	...	...	O.	Elephant to left. (S). A.I., IX, fig. 5. Ayodhya.
44	...	...	O.	Elephant to right or left with head raised. (S). A.I., XI, figs. 1 and 3.
45	...	...	O.	Elephant to right charging; covers the entire field. (S). A.I., XI, fig. 13. These three coins are from Eran.
46	...	...	O.	Elephant to right with head uplifted on a coin of Satakani with the Ujain symbol on Reverse. (481).
47	...	...	O.	Elephant charging. (J.B., VII, XLI, fig. 24. (S). Ujain. The Elephant is represented galloping like a horse.
48	...	...	O.	Elephant to right, straining at heel-rope, by throwing its weight forwards on the fore-legs. (S). J.B., VII, XLI, fig. 9. Ujain. This is the attitude Sir Walter Elliot (N.G., p. 241) describes as "kicking." It is, however, merely the familiar one of the animal straining at the chain on its hind foot.
49	...	...	O.	Elephant standing to left with driver. (S). J.B., VII, XLI, fig. 17. Ujain.
50	...	...	O.	Elephant to right saluting standard. (S). Ujain. 38 grs.
51	...	...	O.	Elephant resting, to right. (S). Ujain. 15 grs. This and the last coin are in the Cabinet of the Royal As. Soc. A similar design on a larger coin. (S)., is figured J.B., VII, LXI, fig. 1. Ujain.
52	...	...	R.	Elephant to right, with three 'Taurines' over the back. (S). J.B., VII, XLI, fig. 14. Ujain.
53	..	...	R.	Elephant to right. A.I., XIII, fig. 2. Nepal.
54	...	...	R.	Elephant to right on a coin of the Yaudhyas. A.I., VI, fig. 3. I am not sure if this design does not cover a political significance. The elephant appears as if uprooting a standard. On the other side of the coin, a standard is seen with a humped bull in front. If the Bull represents Brahminism and the Elephant Buddhism, we then see the triumph of the latter over the former faith.
55	...	...	R.	Three elephants with drivers, one in front, and one on either side facing to right and left. A.I., VIII, fig. 17. On Satrap coins of Rama Datta. Mathura.
				THE HORSE.
56	...	...	R.	A Horse galloping to left with a six-pointed star above. A.I., III, fig. 3. Taxila.
57	...	...	R.	A Horse standing to left with a 'Stupa' above. A.I., III, fig. 5. Taxila.
58	...	...	R.	A Horse to left. A.I., VIII, fig. 7. On Satrap coins of Mathura. In the text (p. 87), the horse is described as on the Obverse, but I prefer to consider the side displaying the King's name, as the Obverse.
59	173	...	O.	A Horse to right. A.I., XI, fig. 1. (S). Eran.

60	...	...	O.	A Horse to left. A.I., X, fig. 19. (S). Ujain. N.G., XI, fig. 92.
61	...	...	O.	A Horse to right. A.I., XII, fig. 14. N.G., XI, fig. 99. Andhras.
62	...	...	R.	A Horse to left. (S). N.G., XI, fig. 97. Cuddapah.
63	...	...	O.	A horse to left with tail over back. (S). J.B., XLIX, XVII, fig. 14. The 'heraldic' style of the tail is suggestive of the legendary steed 'Kaṇthaka' being intended rather than any vulgar horse. Faizabad.
64	...	...	O.	A horse to left drinking. N.G., XI, fig. 95.
				HUMPED BULL OR COW.
65	...	...	O.	A bull to right with a 'Triskelis' over the rump. (A.I., I. fig. 26.
66	...	...	O.	A Bull to left. A.I., V, fig. 7. Kosambi.
67	...	...	O.	A Bull to right. (S). A.I., XI, fig. 11. Eran.
68	...	...	O.	A Bull to right. J.B., VII, LXI, fig. 11. Ujain.
69	...	...	O.	A Bull to left, fronting No. 33. A.I., X, fig. 3. Ujain.
70	...	...	O.	A Bull to right. (S). Ujain. The Bull occupies the field. (494).
71	...	...	O.	A Bull to right. (S). J.B., VII, LX, fig. 2. Ayodhya.
72	...	...	O.	A Bull to left. (S). J.B., VII, LX, fig. 4. Ayodhya.
73	...	...	O.	A Bull to right before a standard on a railed base. A.I., VI, fig. 3. Yaudheyas.
74	...	...	R.	A Bull to left. J.B., VII, XXXII, figs. 17, 18, 19, 22. Satrap coins of Mathura.
75	...	...	O.	A Bull recumbent to left. A.I., XIII, fig. 8. Nepal.
76	...	...	O.	A Bull standing to right with crescent over rump. A.I., XIII, fig. 10. These two coins are of Nepal.
77	...	...	O.	A Bull to right with 'Chattra' over rump (S). Ujain. Cabinet of Roy. As. Soc.
78	...	...	R.	The Cow 'kama dhenu' to left and calf. A.I., XIII, fig. 3. Nepal.

As with the Elephant, so also with the Bull, the conventional Bull of the silver 'Puranas' seems never to have been reproduced on the copper coins. We miss, too, Siva and his Bull, so familiar a reverse on the Scythic copper coins.

				THE LION.
79	...	...	O.	A Lion to right before No. 214. T.P., XIX, fig. 20.
80	...	...	O.	A Lion to left before No. 214. T.P., XX, fig. 34. A.I., I, fig. 27. Both the above are cast coins.
81	...	...	R.	A Lion to right. A.I., III, fig. 1. (S).
82	...	...	R.	A Lion to left. A.I., III, fig. 2. (S). Both these coins are from Taxila.
83	...	...	O.	A Lion to left. A.I., XIII, fig. 1. I prefer to consider this the obverse as the king's name occurs thereon.
84	...	...	R.	A Lion to left with crescent above. A.I., XIII, fig. 6.

				HONUMAN.
85	...	...	O.	A Winged Lion to left. A.I.,, XIII fig. 6. These three are on Nepal coins.
86	...	...	R.	A Lion to left. Mathura. (639).
87	...	...	O.	The black-faced 'Langur' (Semnopithecus) is figured by Walter Elliot. N.G., XI, fig. 103, who calls it a 'dog' (p. 248), but its tail curved at the tip, as no dog's tail is, and well-marked face, prove it to be a monkey.
				THE BUFFALO.
88	...	...	O.	A Buffalo to right. T.P., XLIV, figs. 7 and 8, also A.I., VI, fig. 13. Yaudheyas.
89	...	...	R.	A Buffalo to left. A.I., V, fig. 4. Kunindas. This is the animal persistently miscalled a 'deer' by previous describers. It only occurs on the coins of the 'Kunindas' and 'Yaudheyas.' The symbol of a Buffalo's head is however found on the coins of the White Huns. (Cunningham Num. Chron. Ser. III. Vol. XIV, Pl. X, figs. 3 and 4). The general absence of the Buffalo from Indian coins is certainly remarkable.
				BIRDS.
90	...		O.	A Peacock to left with three tail feathers expanded and with some object (not a snake) in its bill. The bird occupies the field of the coin and is surrounded by an ornamental margin. General Pearce has suggested its being a coin of Rajputana. (3291).
91	...	...	R.	Two upright posts; the one on the right with two cross-bars at the top, the other with a peacock to right. J.B., XLIX, XVII, fig. 11. The peacock looks more like an effigy than a living bird.
92	...	...	O.	A Peacock to left on a raised platform. (3292). A Buddhist coin of rude execution. The Peacock was a common symbol on the silver 'Puranas' but seems to disappear on the latter copper mintages, connected with them.
93	...	...	O.	A cock to left. A.I., VI, figs. 6, 7 and 8. Yaudheyas.
94	...	...	R.	A Teal to right facing a Borassus palm. A.I., IX, fig. 14. The bird certainly looks more like a goose than a Teal, but I suspect the allusion is to the habit of the 'whistling teal' (Dendocygna) or the Cotton-teal (Nettapus) breeding in trees, especially palms. Any identification, however, of such figures as the above must be purely hypothetical. Also J.B., XLIX, XVI, fig. 7.
				FISH.
95	...	...	O.	Two fish opposed to each other in an oblong tank alongside of symbol 31. (S). Ujain. 22 grains. Three coins in the cabinet of the Royal Asiatic Society.
96	...	...	O.	Two fish side by side in a square tank on the right of symbol 31. Ujain. 78 grains. (936).

97	216	62	O.	Two fish to right in a semi-circular area. (S). A.I., XI, fig. 10. Eran. These fish probably represent sacred fish in ponds, as met with at the present day.
98	...	...	O.	A string of fish between parallel lines, perhaps meant for the Bina river. (S). A.I., XI, fig. 3. Eran. In some cases 'Taurines' take the place of fish, and it is sometimes doubtful which symbol is intended.
99	...	...	O.	A fish to right above a 'Swastika.' J.B., XLIX, XVII, fig. 15.
100	...	...	R.	A fish to left, within a ring, bordered exteriorly with nine inverted crescents. N.G., X, fig. 87.
101	...	...	R.	Two fish side by side. (S). J.B., XLIX, XVII, fig. 15. These two symbols are on Buddhist coins from Faizabad.
102	...	...	O.	Three dolphins to left, outside a central ring. (S). On a 2½ Pana piece already described. Eran.
				REPTILES. CRUSTACEA and MOLLUSCA.
103	...	...	R.	A Frog. (S). A.I., X, fig. 13. Ujain.
104	48	31	O.	A Cobra. (Naja tripudians). T.P., XX, fig. 25. This coin though copper, is probably one intended for plating, as the 'Cobra' is a silver symbol not I think found on copper coins.
105	...	...	O.	A pair of Cobras facing each other on their tails. T.P., XLIV, fig. 8, (more clearly seen on the silver coin. A.I., V, figs. 1 and 2). Cunningham calls this simply "a Buddhist symbol," p. 72, but its real meaning is beyond doubt, the two unsymmetrical 'pot-hooks' fairly conveying the idea of a 'dancing' Cobra. On the copper coins the symbol not unfrequently degenerates into a pair of printer's 'brackets.' The symbol occurs on the coins of the Kunindas and on the Satrap coins of Mathura. A.I., VIII, fig. 10, and J.B., VII, LX, fig. 16.
106	...	...	O.	A pair of Cobras with the 'lingum' between. A.I., VII, fig. 12. The central symbol on the top line. One of the Panchala symbols. Also on coins of Mathura. A.I., VIII, fig. 17.
...	...	...	R.	Also as a Reverse symbol on Yaudheya coins. A.I., VI, fig. 8, and on Nepal coins, A.I., XIII, fig. 7, and on coins of the Odumbaras. A.I., IV, fig. 14.
107	...	...	O.	A colubrine snake erect and bent into a crozier-like curve. J.B., XLIX, XVI, fig. 3.
108	...	...	O.	A colubrine snake extended horizontally. (S). A.I., II, figs. 11 and 12. Taxila.
...	...	...	R.	Also on coins of the Kunindas, A.I., V, figs. 3 and 5.
...	...	...	R.	Also on coins (S) of Ayodhya. A.I., IX, fig. 5.
...	...	...	O.	Also on coins of Mathura. J.B., VII, LX, fig. 26.
109	...	...	R.	A river, or irrigation canal in a garden. A snake-like symbol on some coins may be rather intended for a river as on (S) coins of Ayodhya. A.I., IX, fig. 9, and on fig. 12 of the same plate.
...	...	...	O.	And on some coins of Ujain. A.I., X, fig. 16.
...	...	...	O.	And of Eran. A.I., XI, figs. 3 and 12.

110	...	...	O.	Two snakes conjugated in a circle. The extremities of both snakes project outwards from the central circle. J.B., XLIX, VII, fig. 9. Also A.I., VII, fig. 11. On coins of Panchala.
111	...	...	R.	A crab in a ring bordered exteriorly with six inverted crescents. N.G., X, fig. 85.
112	...	...	R.	A 'Conch' shell (Turbinella). A.I., VI, fig. 8. Yaudheyas. A shell is an emblem common to Hindus and Buddhists.
...	...	...	O.	N.G., XI, fig. 105. Andhras. It is remarkable that no representation of the 'Salagram' or Ammonite is to be seen on the coins.

TREES.

The trees represented on these coins fall naturally into seven principal groups.

1. Trees with 'paddle-shaped' or more or less cordate branches.
2. Trees with simple or compound trifoliate or tricuspid branches.
3. Trees with upright tapering pinnate stems; but unbranched.
4. Trees with horizontal spreading branches, the uppermost sometimes being the biggest.
5. Palms.
6. Unsymmetrically branched trees.
7. Thorny stems or simple branches.

These trees may or may not be surrounded below by railed bases or mounds; with three to five (or more) upright divisions or "rails" and two or three (or more) horizontal tiers; and these bases may be adorned at their corners by either 'Chattras' or 'Taurines' placed either on the top corners of the base, or on either side of the base below.

It is not too much, I think, to assume that each of the above types of trees was intended to represent a particular sort of tree, but to identify the tree is a matter of extreme difficulty. On the coins of the Odumbaras (A.I., IV, fig. 2) we may perhaps be justified in referring the tree represented thereon to the 'Odumbara' fig tree (Ficus glomerata) whence the tribal name is derived, but assuredly there is nothing to guide us to that conclusion, on the coin itself. In like manner, where a tree is represented as springing up from the summit of a 'Stupa' the top of which is more or less dilapidated, to make way for it, we may safely infer, from the known habits of the Pipal tree (Ficus religiosa) that the Pipal tree is intended, without other distinguishing marks to guide us. In different parts of India, Ceylon and Burma, different Trees would probably be selected to adorn the

vicinity of monasteries or Pagodas, foremost among which would be the Amherstia, the Durian, the Jack, the Mango, the Jonesia, the Borassus and Corypha Palms, the 'Banian' and many others, valued for the sake of their flowers, fruit or shade, but the species readily cognizable on the coins are but few. On the coins of Kunindas, the Cedar may be fairly made out, the character of the tree being its spreading branches at right angles to the trunk, and whether the 'Cedar of Lebanon' or its closely allied form the 'Deodar' of the Himalayas, the tree is universally accepted as a type of sanctity, beauty and strength. The Fan-palm too, there is no mistaking whether the 'Corypha' is intended or the commoner and more generally distributed, Barassus or Fan-palm of Bengal; and herein I think Mr. V. Smith verges on inaccuracy in calling the 'Tal' palm of India a 'Corypha.' The 'Corypha' is a fan-palm, which having flowered, dies, whereas 'the Tal' of India is a 'Borassus' which goes on flowering year after year, the former tree being planted for ornament, whereas it is the Borassus which is universally cultivated for its fruit and sap.

113	...	...	O.	A Tree with one apical and four central paddle-shaped branches. J.B., Vol. VII, LXI, fig. 7. Ujain.
114	...	...	O.	A Tree, similar to the last, with a 'Taurine' on either side of the base. (S). Ujain. Cabinet of Royal Asiatic Society.
115	...	...	O.	A Tree, similar to the last, but with a base of three tiers instead of two. J.B., Vol. VII, LXI, fig. 5.
116	214	78	O.	A Tree with three trifoliated branches. (S). A.I., XI, fig. 5. Eran.
117	...	...	O.	A Tree similar to the last, but with a five-railed base of three tiers, with 'Chattras' at the corners. A.I., XI, fig. 5. Eran. (S).
118	...	...	O.	A Tree similar to the last, but with five trifoliated branches on a four-railed base of two tiers. J.B., Vol. VII, LXI, fig. 8.
119	...	...	O.	A similar tree but on a base of three tiers. J.B., Vol. VII, LXI, fig. 30. This and the last are from Ujain.
120	...	...	O.	A Tree with four acuminate branches on either side and an apex of similar shape. A.I., VI, fig. 5. Coins of the Yaudheyas.
121	...	...	O.	A Tree similar to the last, but with three lateral branches. A.I., II, fig. 8. (S). Taxila. In this coin the coniferous character is better seen than usual.
122	...	...	R	Eight paddle-shaped leaves radiating from a common centre. J.B., Vol. VII, LXI, fig. 20. Ujain. (997).
123	...	...	O.	A tree with a five-branched head, two horizontal, one apical and two intermediate, all ending in round balls with a similar bifid branch on each side. A.I., VIII, fig. 17.

124	...	...	R.	A Tree with one apical and two lateral paddle-shaped branches. J.B., Vol. VII, LXI, fig. 29. This is the simplest form of a tree, on a coin from Ujain.
125	...	...	R.	A Tree similar to the last, but with a three-railed base and 'Chattras' at the sides. (S). Cast. A I., I, fig. 28, also Ariana Antiqua, XV, fig. 32. (1005).
126	...	...	R.	A Tree similar to the last, but with four lateral branches. (S). Cast. A.I., I, fig. 29. (1008).
127	...	...	R.	A Tree with two lateral acuminate branches and a similar apex on a railed base. (S). A.I., IX, fig. 9. Ayodhya.
128	...	...	R.	A Fan-palm. A.I., IX, fig. 14. Ayodhya.
129	...	...	R.	A Tree with acuminate stem and three paired subcordate branches or fruits. A.I., XII, fig. 1, on lead coins of the Andhras, conjoined with Stupa and raised base.
130	...	...	R.	A smooth upright stem standing on a railed base, and curving to the right at top, whence depends a drupe of three fruits (?) simulating a Stupa, with four lateral 'spathes' or ears. A.I., IX, fig. 9. Ayodhya.
131	...	...	O.	A Lotus flower. N.G., XI, fig. 105. Andhras.
132	...	...	O.	An upright flower (?) A.I., IX, fig. 1. Ayodhya, occupies the field of the coin.
133	...	...	O.	An upright stem rising from a railed base and supporting three equal and similar trifid branches. T.P., XX, fig. 30 and (S), fig. 26.
134	...	...	R.	A four-branched tree, filling the field. N.G., X, fig. 80.
				FLOWERS.
135	...	...	O.	A five-petalled flower, with a carrot-shaped object above, surmounted by a ring. J.B., XLIX, XVI, figs. 1 and 2. Panchala.
136	...	...	R.	A six-petalled flower. (S), J.B., VII, LXI, fig. 17. Ujain.
137	...	...	R.	An eight-petalled flower in a beaded square. N.G., XI, fig. 95.
138	...	..	O.	An eight-petalled flower, with a six-rayed disc in the centre. (S). J.B., VII, LXI, fig. 9. Ujain.
139	211,	147	O.	An eight-petalled flower. (S). A.I., XI, figs. 2 and 4. Eran.
140	...	...	O.	A twelve-petalled flower. J.B., VII, LXI, fig. 7. Ujain.
141	...	...	O.	A fourteen petalled flower on a tall staff. J.B, VII, LXI, fig. 5. Ujain.
142	209,	148	O.	A sixteen-petalled flower (S). A.C. Eran.
143	...	...	O.	A six-petalled flower, over left shoulder of Siva, similar to the flower on coins of Aspa Varma. Num. Chronicle. Ser. III, Vol. X, Pl. XV, fig. 6, where it is termed a 'star.' A.I., V, fig. 5. Kunindas.
144	...	...	O.	A flower pot and plant (Ocymum sanctum ?) in centre of field. A.I., XIII, figs. 14 and 15. Nepal. This side, as it bears the King's name, I consider the observe. A.I, VI. fig. 7. Yaudheyas.
145	...	...	O.	A stem with flowers. N.G., VII, fig. 5½.
146	...	...	O.	A cordate fruit (?) surrounded by twelve dots. (S). J.B., XLIX, XVII, fig. 16, 48 grains. (2618).
147	...	...	O.	A variant of the last with only 9 dots. (S), and weighing 23 grains. (2618). The Reverse is blank in both these coins.

				RIVERS and CANALS.
148	213,	216	O.	A river or canal with 'Taurines' and 'rosettes' alternating. (S). A.I., XI, fig. 7. Eran.
149	...	...	O.	A river or canal with a line of 'Taurines' with cusps pointing to l. (S). A.I., XI, fig. 17. Eran.
150	...	...	O.	A variant of the last with cusps to r. (S). A.I., X, fig. 14. Ujain.
151	...	...	O.	A canal bounding a garden. (S). A.I., XI, fig. 5. Eran.
				BOATS, STEELYARD, 'STUPA,' 'SWASTIKA,' 'TAURINE,' 'SUN,' 'WHEEL,' 'STAR,' 'CRESCENT,' 'CROSS,' 'CADUCEUS,' 'TRISUL,' 'TRIRATNA,' 'FOOD-ALTAR.'
152	225,	61	O.	A coracle. A.I., XI, fig. 9. Eran.
153	59,	9	R.	A Steelyard. J.B., XLIX, XVII, fig. 15. This is a slight variant of a symbol on the silver 'Puranas.' The article is in use at the present day, and is called a 'Tula,' in Bengal. A description of it is given by Raja Kali Kishen Bahadur in J.B., Vol. II, p. 615, who says: 'It is "in principle similar to the Roman 'Steelyard' the fulcrum shifting instead of the weight." In the archaic form of the balance, however, with the beam formed of bamboo, we may assume both the weight and fulcrum to have been fixed, so that fixed quantities only were weighed with the same weight, which might, however, be changed. This is the implement Cunningham describes as an 'axe.' A.I., IX, fig. 3.
154	25	51	O.	A 'Stupa' of three chambers with a crescent above. This symbol occurs on the 2½ Pana piece described in this paper. (S).
155	...	...	O.R.	A 'Stupa' of three chambers with a crescent above. A.I., II, fig. 20. Taxila.
...	...	...	R.	A.I., X, fig. 21. Ujain.
...	...	...	O.	A 'Stupa,' as above. T.P., XX, fig. 27. (S).
156	...	...	O.	A 'Stupa' as above, with an inverted 'Taurine' on either side. A.I., I, fig. 27 (cast).
157	...	...	R.	A 'Stupa' of six chambers. T.P., XLIV, fig. 6. Kosambi. A variant has the crescent above.
158	...	...	R.	A 'Stupa' of six chambers with a T. (chattra) on the top. T.P., XLIV, fig. 7, on coins of the Kunindas; and of the Yaudheyas. A.I., VI, fig. 13.
159	...	...	O.	A 'Stupa' of six chambers, with a tree above. N.G., XI, fig. 101. An Andhra coin.
160	...	...	O.	A 'Stupa' of nine chambers with a crescent above. A.I., XII, fig. 9.
161	...	...	R.	A 'Stupa' of ten chambers, with a tree above. A.I., XII, fig. 2.
162	...	...	R.	A 'Stupa' of ten chambers with a crescent above. A.I., XII, fig. 1.
163	...	...	R.	A 'Stupa' of ten chambers with a tree on the right and a 'Swastika' above. A.I., XII, fig. 6. These four symbols occur on coins of the Andhras.
164	...	...	R.	A 'Stupa' of ten chambers, with a 'triratna' above. A.I., IV, fig. 14. On a coin of the Odumbaras.

165	...	...	R.	A 'Stupa' of three chambers, on a railed base, with a 'Swastika' above. A.I., V, fig. II, Kosambi.
166	...	...	R.	A 'Stupa' of six chambers with a 'triratna' above. T.P., VII, fig. 2. Behut.
167	...	...	R.	A 'Stupa' of three chambers standing on a basement, and supporting four spokes, or rays. T.P., XXXIV, fig. 22.
168	...	...	O.	A five-chambered 'Stupa' with a dot in each chamber; the sixth wanting. N.G, XI, fig. 108. Reverse blank. A thick copper piece, perhaps a weight.
169	...	...	O.	A 'Stupa' of three chambers, supporting a tall T. with a second cross-bar below. (S). J.B., VII, LX, fig. 1.
170	...	...	O.	A 'Swastika' to l. (S). A.A., XV, fig. 32. (S). A.I., I, fig. 28 (deleted from the coin figured). Both these are cast coins.
...	...	...	O.	T.P., XX, fig. 27. (S). A.I., II, figs. 8 and 11. Taxila.
...	...	...	O.	A.I., IX, fig. 2. Ayodhya.
...	...	...	R.	A coin weighing 35 grains with this Obverse has the Reverse blank. A.I., III, figs. 1, 2 and 13. Taxila. (S).
...	...	...	R.	A.I., IV, fig. 14. Odumbaras.
...	...	...	R.	J.B., VII, XXXII, fig. 8. Kunindas.
...	...	...	R.	A.I. V, fig. 7. Kosambi.
171	...	...	R.	(S). A.I., X, fig. 11. Ujain occupies the field.
172	...	...	O.	Swastika to r. A.I., II, fig. 19. Taxila occupies the field.
...	...	...	O.	J.B., XLIX, XVII, fig. 5.
...	...	...	R.	T.P., XX, fig. 51. The Elephant is here considered the obverse.
...	...	...	O.	N.G., XI, fig. 101. E.N.O., I, fig. 27. Andhras. The 'Swastika' is not found on the silver 'Puranas.'
173	...	...	O.	A 'Taurine.' (S). A cast coin of 29 grains. Taxila (1009) occupies the field.
...	...	...	O.	A 'Taurine' with other symbols. (S). A.I., II, fig. 8. Taxila.
174	...	...	O.	A 'Taurine' reversed (S). A.I., I, fig. 28.
175	...	...	R.	A pair of 'Taurines' reversed. A.I., I, fig. 26.
176	...	...	O.	Four 'Taurines' in a partitioned square. (S). A.I., I, fig. 23.
177	...	...	O.	Four 'Taurines' united to form the 'Thunderbolt' symbol. A.I., IX, fig. 2. In a coin I have the Reverse is blank.
178	...	...	O.R.	A 'Taurine' to l. and r. of a 'Stupa' respectively (1011). The 'Taurine' also occurs on compound symbols.
179	...	...	R.	A 'Taurine' forming the fulcrum of a 'Steelyard' (of bamboo, of course, as used at the present day. J.B., XLIX, XVII, fig. 15. In the plate the design is turned upside down. It is the same object as is figured in A I., IX, fig. 3, where it is described as an 'axe.'
180	221	107	O.	Variant of a 'Taurine.' (S). Eran.
181	...	...	R.	Variant of a 'Taurine' with elongated, angularly bent straight cusps in place of crescentic ones. T.P., XLIV, fig. 6. A.I., V, fig. 7. Prinsep's figure suggests a 'scarabæus' but a coin in my cabinet

				hardly supports this idea. Very near the 'm' of Asoka's alphabet. (T.P., II, p. 52).
182	...	...	R.	A Tricuspid 'Taurine.' A circle with the 'y' of Asoka's alphabet above. E.N.O., II, fig. 42. Andhras. (S). A slight variant. A.I., XI, fig. 15. Eran.
183	10	139	O.	The solar wheel (S). Cotton bale on Reverse. Benares (?) average of many coins 27 grains. Cabinet of Royal Asiatic Society also on one coin of 57 grains. Also T.P., XX, figs. 25, 29.
184	...	...	O.	A small sun also occurs on many of the above coins. (S).
185	...	...	R.	A twenty-two-rayed sun covering the field. N.G., X, fig. 79.
186	...	...	R.	A sixteen-rayed sun. A.I., V, fig. 6. Kunindas.
187	...	...	R.	An eighteen-rayed sun with a large disc filling the field. A.I., XIII, fig. 8. Nepal.
188	...	...	O.	Sun and crescent on r. N.G., XI, fig. 108. (Reverse blank).
189	...	...	O.	A small ten-rayed sun in centre of field. A.I., XIII, fig. 10.
190	...	...	R.	An eight-rayed sun in centre of field. J.B., XLIX, IX, fig. 22.
191	...	...	R.	A seven-rayed sun above altar. J.B., XLIX, IX, fig. 24.
192	...	...	O.	A six-spoked wheel surrounded by eight 'Chattras.' A.I., I, fig. 30. Ujain.
193	...	...	O.	A seven-spoked wheel surrounded by eight 'Chattras' shaped like T's. T.P., XX, fig. 30.
194	...	...	O.	An eight-spoked wheel surrounded by six 'Chattras.' J.B., VII, LXI, fig. 2. Ujain.
195	.	...	O.	An eight-spoked wheel with eight oval rings disposed round to the periphery. J.B., VII, XLI, fig. 10. Ujain.
196	...	...	R.	An eight-spoked wheel. T.P., XLIV, fig. 6. A.I., V, fig. 7. Kosambi.
197	...	...	R.	A floral wheel of ten elongated pentagons ranged round a central ring, and occupying the field. T.P., XX, fig. 30.
198	...	...	O.	A flower (?) in a square. J.B., VII, LXI, fig. 16. Ujain.
199	...	...	R.	A central sphere surrounded by two circles with twelve or thirteen balls between the circles. J.B., XLIX, XVI, figs. 1 and 2. Panchala.
200	...	...	R.	A sphere or oval surrounded by seven dots, on a railed base. XLIX, III, fig. 8. Panchala.
201	...	...	R.	An eight-spoked wheel. J.B., XLIX, VII, fig. 2, and LXVI, Pl. XXXVIII, fig. 15, from Ahichetra. A cast coin.
202	...	...	R.	A ten-spoked wheel. A.I., V, fig. 7. Kosambi.
203	...	...	R.	A sixteen-spoked wheel with sixteen corresponding spheres outside the periphery. A.I., III, fig. 13. Taxila.
204	...	...	O.	A six-rayed star. J.B., VII, XXXII, fig. 25.
205	...	...	O.R.	Three 'Taurines' and three 'Chattras' ranged alternately round a central disk. (S). A.I., XI, figs. 20 and 16. Eran.
...	...	...	O.	(S). J.B., VII, fig. 23. Ujain.

206	...	...	O.	Variant of the last with three plain spokes replacing the 'Taurines.' N.G., VII, fig. 5½.
207	...	...	R.	A crescent supporting a T. T.P., XX, fig. 48. Kunindas. (447). In the coin figured in A.I., V, fig. 5, a 'Swastika' replaces this symbol under the Buffalo's belly.
208	...	...	R.	A wheel of four spokes, surrounded exteriorly by sixteen cone-shaped rays or flames. N.G., X, fig. 83.
209	...	...	O.	A six-spoked wheel surrounded by sixteen balls. T.P., XXXIV, fig. 18. A variant with fourteen balls is figured in Num. Chron., Series III, Vol. XIV, Pl. IX, figs. 16 and 17. (767).
210	...	...	O.	A small crescent on forehead of Siva. Kunindas. A.I., V, fig. 5. Not mentioned in the text but on a coin in my cabinet. (447). One of Siva's epithets was Chandra-sekhara or Moon-crested.
211	...	...	O.	A fivefold square or pachymerous cross. T.P., XIX, fig: 17. A.I., II, figs. 15 and 16. Taxila. (S). T.P., XIX, fig. 18. A.A., XXII, No. 167. This symbol is the equivalent of five squares, that is a central square with a similar square erected on each face. It is a very sacred object to worshippers of Siva, the five-faced (pancānana), and on a small square group of brass figures occupies one corner, whilst in the centre the Lingam-yoni is surrounded by the 'Sun' 'Moon,' the bull 'Nandi' the five-headed 'llngum' 'Ganesh,' 'Parbati' and a rim pierced by a cow's mouth to allow the water of sacrifice to escape by. One figure is broken away, hence my acquiring the specimen in the bazaar as old brass.
212	...	...	O.	A fivefold square (as above) with a 'chattra' implanted on each face. T.P., XX, fig. 41. A cast coin.
213	129	177	O.	A sphere surrounded by four 'Taurines' with cusps directed outward; within a five-fold square with a circle containing a cross in each outer angle. (S). Eran. A.C.
214	...	...	O.R.	A food-altar in its simplest form, a horizontal slab of stone or wood resting on an arched support. J.B., LXVI, p. 299. This symbol is to the r. of a 'stupa' on both Obverse and Reverse, in the figure, but on a coin in my cabinet it occurs on the left also. My coin weighs 39 grains. (1, 019).
215	195	122	O.	A food-altar (with or without a 'Taurine') with 'loops' to r., and standing on a railed base. (S).
216	...	...	O.	A food-altar with 'loops' to r. (S). A.I., XI, fig. 8. Eran.
217	57	119	O.R.	T.P., XLIV, fig. 7, (no loops) on coins of the Kunindas.
...	...	...	O.	(S). J.B., VII, LXI, fig. 23. Ujain.
218	...	...	R.	A variant with a bifid curved support. T.P., XLIV, fig. 8.
219	...	...	O.	On a railed base, no loops. J.B., VII, LX, fig. 2.
220	...	...	R.	On a tall staff. T.P., XX, fig. 36. A.I., I, fig. 27. A cast coin.
...	...	...	O.	(S). A.I., I, fig. 28.

...	...	...	O.R.	A.A., XV, fig. 32. This and the last are cast coins. In N.O., p. 61. This symbol is called a 'magic formula.' It occurs with several variations on both silver and copper coins. Its essential feature is that of a flower-pot-shaped receptacle, with or without loops or ears at the side. This I consider represents a begging-bowl, the loops being the bands supporting the bowl round the Monk's neck. To avoid the sin of luring birds to their doom from cats or dogs, the charitable monk placed the remnants of his food on a raised pole or altar that his gift might not lead living creatures into danger. This at least is an intelligible explanation of a highly popular Buddhist symbol, free from the absurdity of calling it a 'magic formula.'
221	...	...	O.	Food-altar protected by a pointed palisade, over which a dog is looking. (S). A.I., II, fig. 5. Taxila. This remarkable symbol gives support to the above view. The pointed stakes clearly are intended to prevent access to the food-receptacle behind them. (930).
222	...	...	O.	A Trisul with axe attached on the left, occupying field. A.I., XIII, fig. 12. Nepal.
...	...	...	O.	A.I., V, fig. 4. Kunindas.
223	...	...	O.	A 'Trisul.' T.P., XIX, fig. 17. This is a very archaic and instructive form of the 'Trisul' and the symbols on the coin are both Hindu and Buddhist. In the centre of the symbol rises a spear-headed shaft or lingum, wherein we can also recognise the 'Thyrsos,' and on either side, by way of supporters, are two erect, but sharply reflexed bodies, in which it is not difficult to trace an early form of the cobras which appear on later coins.
224	...	...	R.	On the reverse of the same coin is a 'Trisul' standing in a circle, or it may be described as a tricuspid 'Taurine' with the median prong prolonged downwards. It merely needs this central prong to be carried still lower to produce the 'Caduceus.'
225	220	135	O.	The 'Caduceus.' (S). A.I., XI, fig. 3. Eran. This is a very rare symbol, but occurs in combination with a cross on other coins of Eran as a Reverse symbol. A.I., XI, fig. 20.
226	...	...	R.	A 'Trisul' covering the whole field. T.P., IV, fig. 5.
227	...	...	R.	Variant of a 'Trisul' with a long cross-bar and an additional prong at each end. J.B., VII, LX, fig. 20. Mathura.
228	...	...	R.	A 'Trisul' above altar of three horizontal strokes. J.B., VII, LX, fig. 26. Mathura.
229	...	...	O.	A variant of a 'Trisul,' with a tall median prong above, and a ring below with a small lateral loop on either side. T.P., XXXIV, fig. 24. Ayodhya.
230	...	...	O.	A variant of the last with a segment of a circle in place of the ring below. T.P., XXXIV, fig. 25.
231	...	...	R.	A 'Trisul' standing on a railed base. A.I., VII, figs. 1, 2, 3. Panchala.
232	...	...	O.	Still another variant is seen on the same plate, a symmetrical trillingual emblem with upright and

				equal rays, the base enclosing a ring, and with a small foot curved downwards on either side. T.P., XXXIV, fig. 22.
233	...	...	O.	A double 'Trisul.' T.P., IV, fig. 3, also XLIV, figs. 21, 23.
...	...	...	R.	Also on the Reverse of Panchala coins. J.B., XLIX, VIII, figs. 16, 17, 18.
234	...	...	R.	A variant of the same symbol occurs on Ceylon coins. T.P., XXXV, fig. 2. Thomas describes this symbol as an alligator. T.P., Vol. I, p. 217, when it occurs on a Mathura coin. T.P., XX, fig. 47.
235	...	...	O.	A double 'Trisul' on a railed base. N.G., IX, fig. 53.
236	...	...	O.R.	A cross with each arm terminating in a ring or ball. This is the simplest form of the symbol, sometimes called the 'four-balled chakra.' (S). A.I., XI, figs. 8 and 19. Eran. A.I., X, fig. 19, Ujain. (S). J.B., XLIX, XVII, fig. 16.
237	202	172	O.R.	Variant with a central ring in each terminal ring. (S). A.I., XI, fig. 1 and 14. Eran. J.B., VII, XLI, fig. 3. Ujain.
238	210	174	R.	Variant with a Taurine in two of the rings, and a 'Swastika' to left in the others. A.I., X, fig. 7. Ujain.
239	...	...	R.	Variant with a 'Swastika' to left in each ring. (S). A.I., X, fig. 5. Ujain.
240	217	175	R.	A cross with long arms each terminating in a ball. In the interspaces between the arms four circles each enclosing four rings. (S). A.I, XI, fig. 7. Eran.
241	...	...	R.	Variant of 237, with four 'Taurines' with cusps directed outwards between the rings. (S). A coin in the Cabinet of the Royal Asiatic Society.
242	...	...	R.	Variant of 237 with four 'Swastikas' to left between the Rings. A.I., X, fig. 1. Ujain.
243	...	...	R.	Variant of 237, with a trifid sprig between the rings. (S). J.B., VII, fig. 9.
244	...	...	R.	Variant of 237, with a quatrefoil between the rings. (S). J.B., VII, fig. 15.
245	...	...	R.	A cross with a 'Caduceus' to the right at the extremity of each arm. A.I., XI, fig. 20. Eran.
246	62	196	O.	A cross with four equal arms, terminating in trefoils. (S). N.O., fig. 4. Eran.
247	...	...	R.	A cross of four triangles within a ring, with a beaded margin. N.G., X, fig. 82.
248	...	...	R.	A Greek 'Phi' on a short base, with the upper stroke removed to the left side below the circle or head. T.P., XX, fig. 48. Kunindas. This is essentially the 'Owl-head' of the silver coins and Trojan pottery, with a side stroke added.
249	...	...	O.	Two ovals ranged endwise in line between two pillars. J.B., VII, LXI, fig. 10.
250	...	...	O.	A ring with a long bihamate arm on either side. T.P., XLIV, figs. 12, 13 and 14. A.I., VIII, fig. 7, on Satrap coins of Mathura. In the last plate (p. 87) this symbol is on the Reverse but as it accompanies the name of the Satrap, I prefer to consider it an Obverse symbol.

251	...	...	R.	A central sphere within a ring, surrounded by four pairs of rings juxtaposed sideways, with the right or left of each ring armed with an out-curving spur, at the periphery. (S). A.I, XI, fig. 17. Eran.
252	...	...	R.	An ornate variant of the 'Thunderbolt' symbol. A central sphere within a ring, surrounded by four 'triratnas' or tricuspid symbols, the central prong being the longest and the outer cusps each supporting a crescent. (S). Ujain. Cabinet of the Royal As. Society.
253	..	...	O.	A square of four balls, two vertical, two horizontal. J.B., VII, LX, fig. 16. Mathura.
254	...	...	O.	Four balls in a square. J.B., VII, LXI, fig. 19. A similar object is probably intended on fig. 8.
255	...	...	R.	A cluster of seven spheres, equal and equidistant. J.B., VII, LXI, fig. 19. Ujain. This is essentially the same as the silver symbols, figs. 155 and 157 of my former paper.
256	...	...	R.	Some object, having a handle below and concave sides. (S). J.B., VII, LX, fig. 28. Can this be meant for a 'dorje' or 'praying wheel?'
257	17	136	R.	The 'Cotton-bale' symbol. N.G., VI, fig. 5½, where it accompanies the Ujain symbol, Catalogue of the Coins of the Indian Museum, Part III. (5). Nos. 10,014 and 12,374. This symbol according to Sir A. Cunningham. A.I., p. 56, is found on coins from the Benares province. In my paper (fig. 136) it is very badly figured. In N.O., fig. 16, it is erroneously figured to make it look like a 'Caduceus' and at p. 61, is included among 'Magic formulæ.'
...	...	...	O.R.	The figures above from the Indian Museum are silver coins, but on several copper coins (S) belonging to the Roy. As. Society and in my own cabinet the symbol occurs on both Obverse and Reverse of the same coin. These coins average 33 grains and are ¼ Panas, and are the only punch-marked copper coins I know of the same character as the silver Puranas and with many of the same devices on them. Sir Walter Elliot says the same thing "A single example (fig. 5½) of the same kind of money in copper was found among a quantity of Buddhist coins from Ujain. This is the only example we have met with of a true punch coin in baser metal" N.G., p. 228. Ujain, Eran and Benares would therefore seem to be the only mints which issued true copper 'punch-coins.'
258	...	...	R.	A 'Triratna.' T.P., XLIV, fig. 8. Kunindas. On these coins it occurs above the Stupa. A single example only is known to me of this symbol on a silver Purana, in my cabinet, No. 95 of the first part of this paper.
...	...	...	R.	A variant also occurs on Panchala coins. J.B., XLIX, XVI, figs. 3 and 5.
...	...	...	O.	And on Ayodhya coins. A.I., IX, fig. 8.
...	...	...	R.	And on Yaudheya coins. A.I., VI, fig. 3 (deleted in plate above Elephant's head). (457).

259	...	...	O.	A small central square, with four arms radiating diagonally to the corners of the coin. (S). Average weight 38 grains. One coin suggests that these arms are 'Chattras' and some small designs occur between the arms. Cabinet of the Royal Asiatic Society.
260	...	...	R.	Cross lines forming twelve or more squares. On the reverse of some of the above coins.
261	...	...	R.	A variant. J.B., XLIX, XVI, fig. 10. Panchala.
262	...	...	R.	Two inverted horse-shoe-like curves, united in the middle below, and with three dots above. A.I., VI, fig. 7. Yaudheyas.
263	4	129	O.	Twin spheres. J.B., XLIX, XVI, fig. 6. Panchala.
264	...	...	R.	An inverted triangle supporting two loops above, and and from the apex below depend two conjoined rhomboids. Below is a circle with a dot on either side, the whole enclosed by what may represent four chattras, seen in perspective, as standing at the four corners of a square. J.B., XLIX, XVI, fig. 4. Panchala.
265	...	...	R.	A staff hooked to the right at top, standing on an oval base, with two lateral arms curving downwards. J.B., XLIX, XVI, fig. 1. A variant on fig. 2, with a lateral loop.
266	..	...	R.	A staff ending above in a ball and standing on an oblong base. Below the ball is an arm on the right bent down at the end and below it a similar arm, which is continued to the left, and there bent upwards. J.B., XLIX, XVI, fig. 1. This and the last are 'supporters' of a central disk. A variant of the above on fig. 2 is a simple staff on a square base, with two plain cross-bars.
267	...	...	O.	A short upright staff with two short cross-bars, standing on a square. J.B., XLIX, VII, fig. 10, or a circle IX, fig. 20. Panchala. Mr. Carlleyle calls this cross (p. 24) a Boddhi tree, but this view is I think erroneous.
268	...	...	R.	A raised base, or 'Chabutra' of three divisions, flanked on either side by a slightly outwardly inclined post with three cross-bars above. J.B., XLIX, VII, fig. 10. A variant has the post upright and terminating in thistle-shaped heads, VIII, fig. 12. Panchala.
269	...	...	R.	A lotus supporting a female standing figure. J.B., XLIX, VIII, fig. 18. A variant of the above with beads in place of petals, fig. 17.
270	...	...	O.	Upright staff with a cross-piece resting on the top, the end bent upwards on the left and downwards on the right. T.P., XV, fig. 30. Ujain.
271	...	...	O.	Upright staff with three arms projecting to the right the lowest of which just projects a little to left. Ujain. J.B., VII, LXI, fig. 10.
272	...	...	R.	Upright object rising from a crescent, resting on a raised base, and supported on either side by inclined posts, with a stupa and crescent on either side of base. A.I., III, fig. 7. Taxila. A variant of the above is seen on fig. 6.
273	...	...	O.	Pole and pennon resting on a railed base. A.I., VI, fig. 2. Yandheyas.

274	109	116	R.	A variant of this ambiguous symbol is on the Reverse of a Punch-marked coin, in the cabinet of the Royal Asiatic Society.
275	244	218	O.	Two crescents with either convex surfaces touching. Not uncommon on coins from Benares with symbol of 'plumed warrior.'
276	...	...	O.	An object that Sir Walter Elliot calls an Altar. N.G., p. 247. To me it is more suggestive of either an oil-mill or a rice-husking mortar. Above it is a horizontal stroke representing the 'pestle' used in either case. N.G., XI, fig. 97.
277	..	...	R.	Four balls in a cirele. N.G., XI, fig. 103.
278	...	...	R.	Two rings, separated by an indistinct upright object. N.G., X, fig. 67.
279	...	...	R.	A variant of a Stupa, within three lined squares. N.G., IX, fig. 53.
280	...	...	O.	A heraldic Lion or 'Griffin.' On some coins figured by Sir Walter Elliot, a Griffin seems to take the place of the sublunary Lion. N.G., IX, figs. 48, 50, 52, 61, 62.
281	...	...	O.	An upright sword. N.G., IX, 50.
282	...	...	O.	An upright pointed staff, with three diminishing cross-bars. N.G., IX, fig. 50.
283	...	...	R.	Three triple umbrellas or Chattras, produced above into a point, within a rayed circle. N.G., IX, fig. 48.
284	58	56	R.	Bow and arrow. N.G., IX, fig. 61.
			O.	Bow and arrow. A.I., XII, fig. 6. An Andhra symbol.
285	...	...	R.	A bow within a ring surrounded by seven inverted crescents. N.G., X, fig. 84.
286	...	...	R.	Sun on left, crescent on right, separate by a V-shaped ornament with an inverted crescent below and surmounted by 'Taurine,' with a pair of dots above and below. N.G., IX, fig. 56. Sir Walter Elliot describes the central object as a "sword of the peculiar short form so often represented on Hindoo sculptures." (p. 239). I can see not the remotest resemblance to a sword, the object possessing neither handle nor point.
287	...	.	O.	A sun (wheel) on a pole with a crescent above. N.G., IX, fig. 61.
288	...	...	R.	A 'Ratth' or Idol car. N.G., IX, fig. 62.
289	...	...	R.	An upright dagger-shaped object occupying the field, and resting on a beaded base. N.G., IX, fig. 60.
290	...	...	R.	A Cordate area partitioned into four divisions. (S). N.G., X, fig 63. Is it possible that the 'Bale-mark' of the E.I.C. can be borrowed from this device?
291	...	...	R.	A ring within a ring, with fourteen crescentic rays radiating from the periphery. N.G., X, fig. 86.
292	...	...	O.	A two masted ship. N.G., X, fig. 74. Reverse symbol No. 236, E.N.O., II, fig. 45. Andhras.
293	...	...	R.	A boat or 'dug-out' laden with produce (?) with a curved line below to signify water, all within a ring surrounded by eighteen radiating oval objects. N.G., X, fig. 89.

294	...	...	O.	Plan of a Lamasarai with 'Stupa' in courtyard. (S). A.I., II, fig. 12. (439). I am not sure if the object in the centre does not rather represent a tree, possibly Cupressus sempervirens cultivated in India in gardens for its freshness and beauty.
295	...	...	R.	Plan of building, with three forked objects, either trees or Trisuls, whereof the middle one is tallest, and supports an umbrella. N.G., XI, fig. 102. Sir Walter Elliot calls the side objects "ladders" but it seems preferable to consider them as the plan of the dwellings of the priests, whether Hindu or Buddhist.
296	...	...	O.	A Y-shaped object with curved sides and a cross-bar. (S). J.B., VII, LXI, fig. 24. Ujain.
297	...	...	O.	Symbol *d* of the piece of Eran described in this paper.
298	...	...	R.	Symbol *f* ditto.
299	...	...	R.	Symbol *g* ditto.
300	...	...	R.	Symbol *i* ditto.

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Postscript to Mr. Theobald's paper (Vol. LXX, Part I, No. 2, p. 38, 1901.)

Since writing the above I have acquired a silver 'Purāṇa' with the figure of a Rhinoceros on it. This animal will therefore remain on the list of animals on those coins.

I find too that by some inadvertence, the Rhinoceros has been excluded from the list of animals found on copper coins, though I had already figured it in my paper (J.A.S.B., 1890., Part I, p. 217, fig. 14) which figure was from a copper coin of Ujain. The Rhinoceros may therefore be inserted in the list on p. 71 as 55 A., that being its proper place among animals.

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CINERARY URN

FROM YOTKAN, A VILLAGE OF THE BORAZĀN TRACT, NEAR KHOTAN.

(Restored.)



ORIGINAL SIZE, ABOUT 11 × 13″.

A REPORT

ON THE

BRITISH COLLECTION OF ANTIQUITIES

FROM

CENTRAL ASIA

WITH

THIRTEEN FACSIMILE PLATES, THREE TABLES

AND

SIX WOODCUTS

PART II

BY

A. F. RUDOLF HOERNLE, C.I.E., PH.D. (TÜBINGEN).

Extra-Number 1 *to the Journal of the Asiatic Society of Bengal, Vol. LXX, Part I,* 1901

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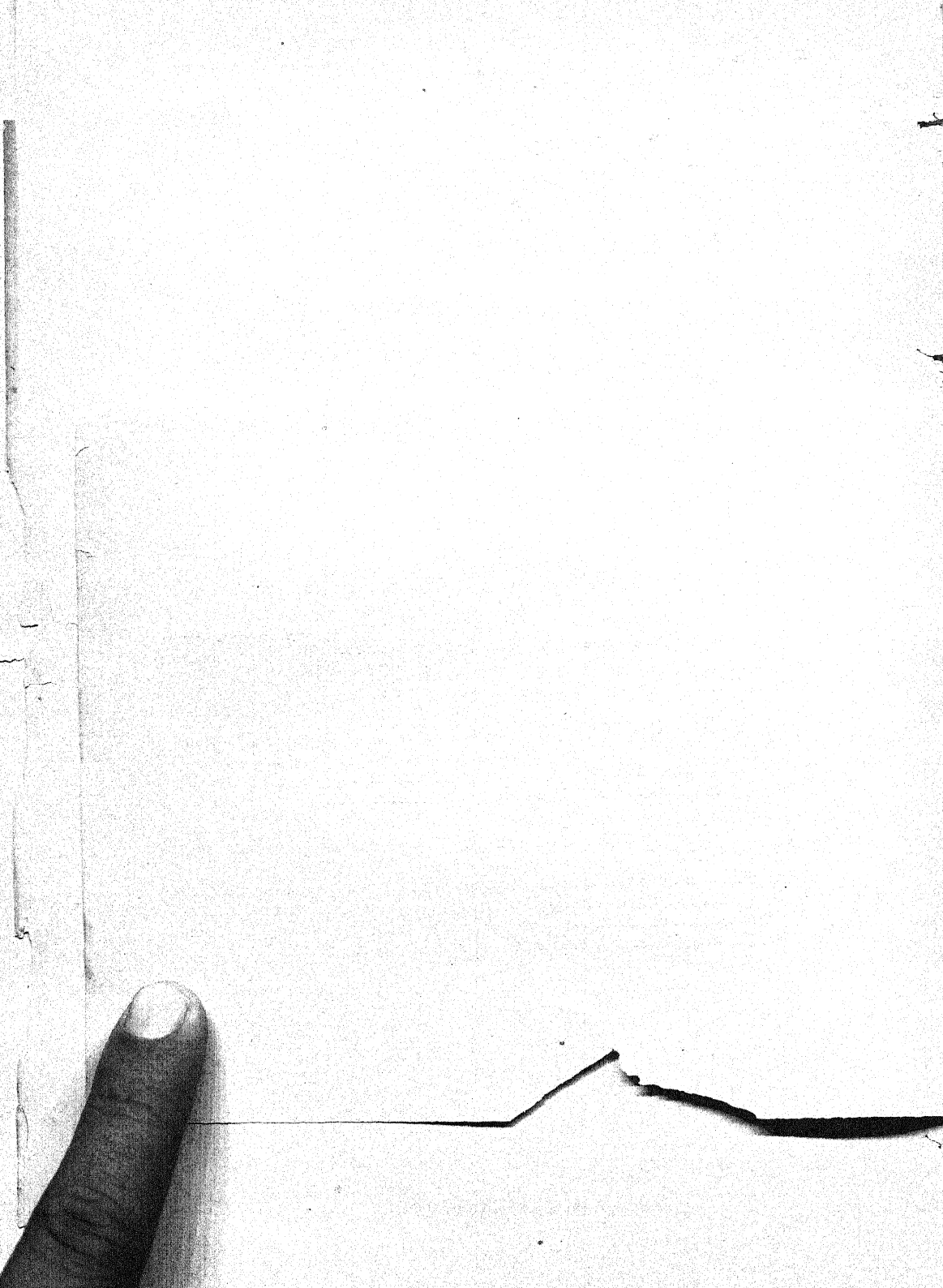
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Frontispiece. Cinerary urn from Yotkan, a village of the Borazān Tract, near Khotan.



JOURNAL

OF THE

ASIATIC SOCIETY OF BENGAL

Part I—HISTORY, LITERATURE, &c.

Extra-Number 1.—1901.

A Report on the British Collection of Antiquities from Central Asia.—By A. F. Rudolf Hoernle, C.I.E., Ph.D.

(With 3 Tables and 13 Plates.)

INTRODUCTORY REMARKS.

The Second Part of my Report deals with the manuscripts, pottery, terracottas, and other miscellaneous objects of the British Collection. When the First Part, treating of the coins and block-prints was issued early in 1899, the question of forgery was still an open one. In the concluding remarks of my Introduction (p. xxxii) I pointed out how desirable it was that it should be investigated on the spot by an European explorer. Dr. Stein's archæological expedition to Eastern Turkestan was at that time already being organised; and the Second Part of this Report has purposely been delayed in order to profit by the results of his investigations. His tour has now been brought to a successful conclusion. A full account of its results will have to be looked for in Dr. Stein's own report. But the communications which I received from him, partly by letters written in the course of his travels and partly verbally since his return from Turkestan in July, 1901, enable me, with his concurrence, to indicate here briefly some of the results so far as they have a direct

bearing on the question of the genuineness of the objects comprised in the British Collection.[1]

* By means of his own explorations of ancient sites in the Khotan region, and by his local enquiries, Dr. Stein has obtained definite proof that all "blockprints" and all the manuscripts in "unknown characters" procured from Khotan since 1895 are modern fabrications of Islām Ākhūn and a few others working with him. The fact of these blockprints and manuscripts being modern forgeries was first established by independent evidence, and subsequently received confirmation by the full confession which the forger himself, in April last, made to Dr. Stein. Islām Ākhūn, on the same occasion, furnished detailed information as to the methods and means employed in preparing his forgeries.*

Of these manuscripts in "unknown characters" it has now become unnecessary to publish detailed descriptions. Those whom it may interest may see specimen pages of two such codices, published in Plate 8 of M. D. Klementz's report on the Russian Expedition to Turfan.[2] Several codices of that class are in the British collection. Other specimens of fabricated manuscripts may be seen in Plates XI–XX which accompany my paper on "Three Further Collections of Ancient Manuscripts from Central Asia" in the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897).

* Islām Ākhūn's account of the places where the finds are said to have been made is an invention. These places (see Introduction, pp. xvi–xxii) either do not exist, or exhibit physical conditions in which the survival of ancient manuscripts appears highly improbable.* As to Aq Sapil, I believe that the interpretation of the present appearance of the place in the letter quoted on pp. xiv–xvi cannot be sustained. On the other hand, Dandan Uiliq is the genuine site of an ancient sand-buried settlement. It is very probable that many of the genuine manuscripts comprised in the Collection were originally obtained from there. For * Dr. Stein, in the course of the explorations of which a brief preliminary account has been given by him in the Journal of the Royal Asiatic Society, for April, 1901,[3] excavated there a considerable number of manuscripts of a very similar description, all written either in Brāhmī or Chinese characters.*

As regards the coins and seals, shown in Plates I–III of the First Part of this Report, as well as the objects shown in Plate XIX, there is

[1] Statements based on Dr. Stein's communications and embodied in these Introductory Remarks are enclosed between asterisks.

[2] *In Nachrichten über die von der kaiserlichen Akadamie der Wissenschaften zu St. Petersburg im Jahre 1898 ausgerüstete Expedition nach Turfan. Heft I.*

[3] In Art. XII, *Archæological Work about Khotan.*

no reason to doubt their genuineness. This also applies to the objects shown in Plate IV, except No. 1 and Nos. 3–11, which were used in the binding of blockprints, and for that reason are of a questionable character. Among the objects shown in Plate XIX are numerous miniature terracotta figures. Others of a similar kind, but of larger size, are shown in Plates X and XI accompanying this Part of the Report. These as well as the fragments of pottery now described and figured are genuine. They were all obtained from the ancient site hitherto designated as "Borazan" (Introd., pp. xii–xiv), but the real name of which, as Dr. Stein has shown, is "Yōtkan, a village of the Borazān tract." Some details as to the conditions in which antiques have been preserved at that site, will be found recorded in his preliminary account already quoted.

It may be noted here that an attempt indeed was made to fabricate also entire pieces of pottery. The result, however, was too grotesque to deceive. Early in 1898 I received the photographs of two complete jars, the fabrication of which there was no difficulty in detecting when compared with genuine fragments. From some of the latter, shown in Plate VIII, the "Funeral jar" which forms the frontispiece of Part I, is reconstructed.

* Respecting the objects in metal, stone, or wood, while some prove themselves by their appearance to be undoubted products of the ancient Buddhist civilization of Eastern Turkestan, in the case of others their age and *provenance* is quite uncertain. Objects of this kind collect in the bazars of Khotan and other towns in Eastern Turkestan, and the statements of the Natives regarding them are quite unreliable.* To this category belong the two horsemen referred to on page xx of the Introduction, and equally uncertain is the age and *provenance* of the skull there mentioned.

* There is good reason to believe that certain wood carvings, among them the box purchased at Khotan by Captain Deasy and published in the Journal of the Royal Asiatic Society for April, 1900,[4] have to be added to the list of articles from Islām Ākhūn's factory.* A curious resemblance, however, may be noted, of the figures carved on the box, to some mud and metal figures, shown in Plate XIII, Nos. 11–13, the genuineness of which there seems no reason to question. Assuming the spuriousness of the box, such genuine figures may have served the carver as models.

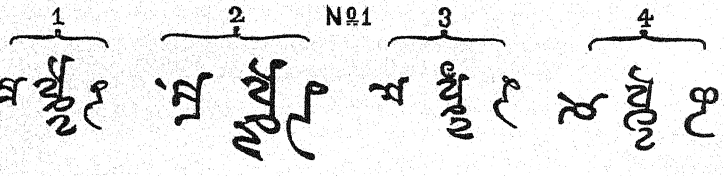
* The fabrication of manuscripts seems to have commenced early in 1895. After about two years it was abandoned in favour of the easier method of manufacturing blockprints. The forged manuscripts

[4] In Art. XIV, *On an ancient blockprint from Khotan.*

are distinguished from the genuine finds not only by their "unknown characters," but also by their paper, which is modern in substance, and in colour and condition shows evidence of having been artificially manipulated.* The fabricated manuscript books are distinguished also by their peculiar binding after the manner of Codices, like the blockprints. All the genuine manuscript books of the Collection observe the form of the Indian *Pothi;* and all the genuine scripts belong to known types, such as Brāhmī, Kharoṣṭhī, Chinese, Uigur, Persian. All these are represented in our Collection of manuscripts and coins.

The earliest fabrications of manuscripts were evidently executed with much care and ingenuity. Genuine manuscripts seem to have been imitated: otherwise it is impossible to explain the production of manuscripts which could deceive the eye of expert scholars by their resemblance to Pahlavī or Brāhmī.[5] In four of the earliest manuscripts, Brāhmi letters and letter-groups are imitated, greatly resembling those which are seen in Pothi No. I of Set II (see p. 18). The subjoined Woodcut shows facsimiles of the word *ma-lkye-ṛ* as imitated from the Pothi in which it occurs very frequently.

No. 1.

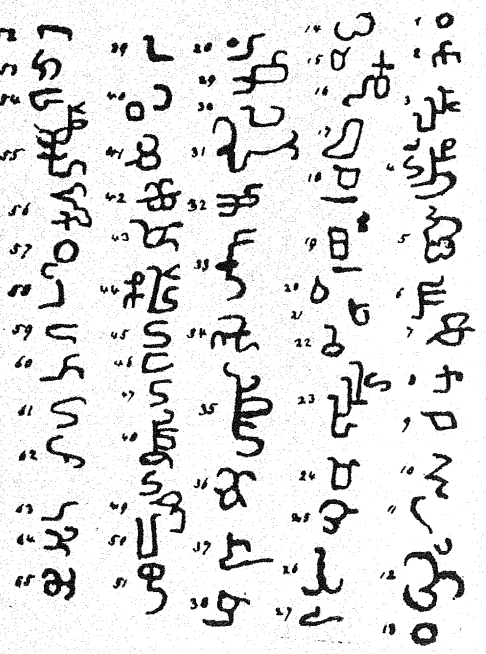


No. 1 is taken from the Pothi, Nos. 2 and 3 from two of the four fabricated Codices above referred to, and No. 4 occurs in the formula of the IVth Set of Blockprints (see Part I, p. 85 and Plate XII). It was the latter formula which furnished me with the first distinct evidence of fabrication. This formula, as it stands in the blockprints, appears to be written in a species of "unknown character." Comparing it, early in 1901, with the Brāhmi writing in the Codices, it suggested itself to me to examine the formula in a mirror, when it became at once apparent that it was written in precisely the same character as the codices, only the writing was reversed in print. In Table I the formula is shown in

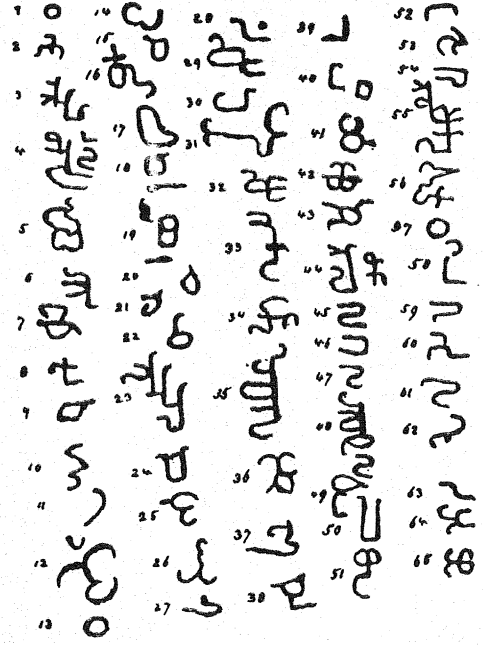
[5] Thus, Dr. E. West who very kindly examined a manuscript book of 56 leaves ($7\frac{3}{8} \times 5\frac{3}{8}$") which seemed to imitate Pahlavī writing, writes to me (July, 1901): "I find that the Pahlavi words I have collected form one-twelfth of your large MS., contain 13, out of 15, Pahlavi letters, and represent 27 out of the 33 known Pahlavi sounds. So that a twefth part of the MS. has supplied five-sixths of the Pahlavi alphabet and sounds. But it has not supplied a single *intelligible* clause of a sentence."

Formula of Block-print No. IV.

1. As Printed.



2. Reversed.



both positions. It was now obvious that whoever prepared the block, wrote the text on it in vertical lines in the ordinary position, and engraved it in that position, oblivious of the fact that as a consequence, in printing off the block the text would come out reversed and be illegible. Such carelessness would hardly have occurred to one who understood the script and its language. The same conclusion is suggested by the inexplicable separation of the elements of the word *ma-lkye-r* which are found as Nos. 43, 48 and 51 in the fourth line. Moreover most of the letters of the formula have no resemblance whatever to Brāhmī characters. The written codices which were the first products of Islām Ākẖūn's workshop were done with far greater care, and though also largely interspersed with "unknown characters" might have continued to suggest genuineness, if the fraud had not been definitely exposed through the personal investigations of Dr. Stein, to whom finally Islām Ākẖūn made a full confession. In Plate I, No. 1, is shown one of the most curious specimens of an early fabricated codex. It is that which was contained in the bag said to have been dug out with the skull resting upon it (Introd., p. xx). The leaves are cut in the shape of a round-bottomed, narrow-necked bottle, with a long pendant lip. They are held together by a small tubular copper-peg which passes through the neck. The leaf shown in the Plate is the last of the inscribed leaves of the codex. The word *malkyeṛ* is seen in the middle of the second line. A very nearly corresponding version of the text occurs on the final inscribed leaves of other two codices which are also shown in Plate I, Nos. 2 and 3, and where the word *malkyeṛ* appears in a corresponding place in the second line. Specimen pages of the two latter codices are also shown in Plate XVIII, XIX and XX of the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897). Another version of the same text stands on a leaf of the codex shown *ibidem*, Plate XVII. Here the word *malkyeṛ* occurs, *e.g.*, on the page marked "II. Obverse," in the middle of the bottom-line.

Section III.—MANUSCRIPTS.

The manuscripts, comprised in the British Collection, fall into two groups, which may conveniently be distinguished as Pothis, or books done up in the Indian fashion, and Documents consisting of single sheets.

First Group. Pothis.

Number.

Altogether there are thirteen Pothis in the Collection. None of them is complete, and of most of them no more than a few leaves or fragments of leaves exist. The only exceptions are Nos. 1 and 2 of Set I and No. 1 of Set II, of which 25, 17, 17 leaves respectively survive. These three Pothis belong to the Macartney MSS. They, as well as some other Pothis, belonging to the Godfrey MSS., have been already described by me in the Journal of the Asiatic Society of Bengal, Vol. LXVI for 1897; but for the sake of completeness and some additional information, since obtained, they will be here briefly re-described.

Findplace.

Three of the Pothis, *viz.*, the Macartney MSS., Nos. 1 and 2 of Set I and No. 1 of Set II, are said to have been found in the identical Stūpa near Kuchar in which also the Bower MSS. and the Weber MSS. were discovered. Their discovery has been related in the Introduction, pp. x–xii. In corroboration of the existence of a possible deposit chamber from which they were dug out, I may now add that, as Dr. Stein informs me in a letter, written from Yarkand (24th September 1900), he found, about 20 miles N.-E. of Kāshghar, in a place called Khānnui, a "remarkably well preserved Stūpa with its Vihāra," in which "a cutting made a long time ago had laid bare a square chamber and shaft inside." Native testimony, however, as Dr. Stein has since verbally explained to me, even if honestly given, is very unreliable; and it is by no means certain that, even if the stūpa near Kuchar contained a chamber, the manuscripts were found in it. Still from their appearance which shows no sign of the action of sand on them, it seems clear that they must have been preserved in some receptacle; and there seems, therefore, in this particular case, no sufficient reason to discredit the native report of their having been dug out from the chamber of a stūpa (see Introd., p. xi). The case is different with regard to the other Pothis. They show distinct signs of the action of sand on them; and they must have come from a sand-buried site.

As to the identity of this site nothing certain is known. Some (Set I, Nos. 3, 5, Set II, Nos. 4, 5, 6) are said to have been found in "an old buried town in the vicinity of Kuchar" (Introd., pp. viii, ix). Of the rest, all that is known is that they were found "somewhere in the Takla Makan." Seeing that similar manuscripts were found by Dr. Stein in the sand-buried houses of Dandan Uiliq, N.E. of Khotan in the Takla Makan, it is not improbable that the Pothis in question also originally came from that place.

Definition.

A Pothi consists of a number of leaves, cut of a practically uniform oblong shape, generally enclosed between two wooden boards, and held in position or "bound" by a string which passes through a hole drilled through the whole pile. This fashion of making up a book is peculiar to India. In all Pothis, existing or surviving in India, the hole is placed in the middle of the pile of leaves; or there are two holes, at equal distances from the margin, in the middle of the right and left halves of the pile. On the other hand, in the Pothis from Central Asia there is only one hole, which is invariably in the middle of the left half of the pile (see Plate II, figs. 1, 4, 5). There are reasons to believe that this was also the practice in India in very early times. In the old Indian copper-plate grants, the copper leaves are strung together on a copper-ring which passes through a hole close to the left margin of the leaves. The practice of incising records on metal plates is a very ancient one in India: instances of such records on gold plates are already mentioned in the Jātaka book (see Professor Bühler's Palæography in the Cyclopædia of Indo-Aryan Research, p. 90). The practice was afterwards transferred to manuscript books, when the latter came into vogue. But owing to the fragile nature of their material (palm-leaf or birch-bark) the hole was naturally placed further away from the margin, about the middle of the left half of the leaves. This may be seen in the Bower MSS. which is written on birch-bark, and Part II of which belongs to the earlier part of the 5th century A.D. Somewhat later, the practice arose, for the greater safety of the leaves, to make two holes at corresponding distances from the right and left margin. The earliest examples of this practice are presented in the Horiuzi MS. (see Anecdota Oxoniensia, Vol. I, Part III, Plate I), and in the two Nepalese manuscripts of the Cambridge Collection, Nos. 1702 and 1049 (Mr. Bendall's Catalogue, Plate I, figs. 1 and 2), all of which belong to the 6th century A.D. Still later arose the practice of replacing the two holes by one hole in the middle of the leaves. The existence of this practice is recorded by Alberuni in the 11th century, who says (Professor Sachau's Translation of Alberuni's India, Vol. I, p. 171), that "the Indians bind a book

of palm-leaves together by a cord on which they are arranged, the cord going through all the leaves by a hole in the middle of each." The hole was not at first in the exact middle, but—probably a modified survival of the ancient practice—slightly more to the left, as seen, *e.g.*, in the Nepalese manuscript No. XXI (Palæographical Society) which is dated in 1015 A.D. Still later, and at the present day, the hole appears in the exact middle of the leaves. The peculiar position of the string-hole in the Central Asian Pothis, therefore, points *pro tanto* to a very early date for the introduction of the Indian fashion of book-making into Eastern Turkestan, and for those Pothis themselves. As to the wooden covering boards, only those of one Pothi, No. 1 of Set I, are included in the British Collection. Of another Pothi, No. 2 of Set I, one of the wooden covers exists, but it belongs to the Weber MSS. collection, which also includes a portion of that particular manuscript: the other cover is missing (see my Report on the Weber MSS. in the Journal of the Asiatic Society of Bengal, Vol. LXII (1893), pp. 2, 5, 32). One of the covers of Part I of the Weber MSS. (see *ibidem*, pp. 2, 9), as well as the two covers of the Bower MSS. also exist. Seeing that the Bower MSS., the Weber MSS. and the Macartney MSS. are said to be proceeds of the same find (Introd., pp. x–xii), it seems not improbable that the covers of all the manuscripts comprised in the find were originally found, though only those above enumerated have been obtained from the finders.

Wooden Boards.

All the Pothis are written on paper. The paper is soft, and of a whitish colour. The only exception is the Pothi, No. 3 of Set II, the paper of which is hard and stiff, and of an orange colour. It is clearly coloured artificially, and its rigidity may be due to that cause. The whitish colour of the other paper is, no doubt, its natural colour. Regarding the material of which the paper is made, I can offer no opinion. Not possessing the requisite technical knowledge myself, I have submitted specimens for determination to Hofrath Professor J. Wiesner, of the University of Vienna, who will publish a report of his investigation when it is finished. In the meantime I am informed by him that the papers of the Pothis differ in one point: that of Pothis Nos. 4, 5, 7 of Set I, and No. 3 of Set II, is sized or loaded with starch. On the other hand, he could not detect any trace of starch in the paper of the Pothis Nos. 1, 2, 3, of Set I, and Nos. 1, 2 of Set II, though this does not prove absolutely that no starch was used in its preparation.[1] There is also another difference which I have noticed myself. Some of the papers exhibit parallel waterlines,

Paper.

[1] No. 6 of Set I and Nos. 4, 5, 6 of Set II have not been examined by him.

showing that the sheets of this paper were made in "moulds" or frames with an open bottom; while others do not show any waterlines, and evidently were made in moulds with a comparatively solid bottom. In the latter, the bottom would seem to have been made with a piece of coarse cloth stretched across the frame. In the former, parallel lines of string, or wire, or bamboo fibre must have been stretched across the bottom of the frame, as shown by the waterlines in the paper. The strings were fixed very close to one another; for in the paper there are about 14 waterlines to an inch. To judge from the absence of any corresponding waterlines, the moulds do not seem to have been provided with any transverse supporting strings or wires. Pothis Nos. 1 and 2 of Set I, and No. 1 of Set II, are written on paper without waterlines, while the paper of all the others shows them. It is possible that on further enquiry, the two points of difference here noted may yield a test of age. For the present, the information on both points is insufficient for the purpose. As Professors Wiesner and Karabaček have shown (*Mittheilungen aus der Sammlung Papyrus Erzherzog Rainer, 1887*), the Arabs, who learned the art of paper-making from the Chinese in Samarkand in 751 A.D., knew, in the 9th century, the practice both of loading the pulp with starch and making paper in open-bottomed moulds. They used moulds with and without transverse supporting strings or wires; and the paper, made in their moulds, shows 15 waterlines to an inch (or 6 to a centimetre). There is no reason, so far as I know, to believe that they were the inventors of either of those two practices. The presumption is rather the other way; for the British Collection possesses two Chinese documents, dated 768 and 786 A.D. (see below, p. 22), both of which are written on sheets of paper showing waterlines as well as the presence of starch. So far, all the Pothis may be anterior to the 8th century A.D.; some of them, as will be shown presently, are certainly several centuries older. In any case, the method of making paper in solid-bottomed moulds is cruder and more primitive than that of making it in open-bottomed ones. Accordingly Pothis written on paper without waterlines, *i.e.*, made by the former method, are *pro tanto* likely to be older than those written on paper with waterlines. To the former class belong three Pothis, Nos. 1 and 2 of Set I, and No. 1 of Set II, which are said to have been dug out from the Kuchar stūpa; to the latter belong all the others. Judging by this test, the Pothis of the Kuchar stūpa are older than the rest. A further peculiarity of the Pothis of the Kuchar stūpa is that their leaves are covered with a more or less thick smooth coating (of chalk?) on which the letters are traced. It is of a white colour and particularly noticeable in the case of No. 2 of Set I. In

Coating.

the case of No. 1 of Set I, it is discoloured and has assumed a dun colour. As the paper of these Pothis is not starched, the coating may perhaps have been intended to prevent the ink from running. In many places it has peeled off, and with it the writing has disappeared. The letters appear to have been traced with some kind of pen, probably the Indian reed-pen, not the Chinese brush. This is suggested by the sharp angles and clean-cut lines of the letters, which is particularly noticeable in the Pothis, Nos. 3–7 of Set I and Nos. 3–5 of Set II. (See Plate II, fig. 3.)

Shape and Size.

In the shape and size of the leaves of the Pothis there is much variation; but they all agree in being decidedly oblong. In this particular, they clearly imitate the Indian palm-leaf. In India two kinds of material were used for book-writing, the leaves of the Corypha palm (*Corypha umbraculifera*) and the inner bark of the birch tree (*Betula utilis*), both in a prepared state. Palm-leaf was the common material, employed everywhere throughout India: its shape, a decided narrow oblong, was determined by the shape of the segments or strips of the natural leaf. Birch-bark was only used in the extreme North-West of India, concurrently with palm-leaf; and its shape was that of large, squarish sheets.[2] Seeing that the paper was made in large squarish sheets (see below, p. 23), and that a narrow oblong is a less convenient shape for a writing material than a squarish sheet, it is obvious that the practice of cutting up paper into narrow oblongs must have been determined by people who were accustomed to the Indian use of palm-leaves. As the Bower MSS. show, even birch-bark was occasionally treated in this way and cut up into oblongs after the model of the Corypha-leaf. The normal size of paper Pothis is about 2 (or $2\frac{1}{2}$) by 12 (or 14) inches; see Nos. 3 and 4 of Set I, and Nos. 2 and 3 of Set II (Plate II, fig. 4); and this is also the normal size of a palm-leaf Pothi. But paper, being cut out from very large sheets, naturally permitted a much greater variation in shape and size than the natural palm-leaf. Hence we have Pothis as small as 2×5 or $2\frac{1}{2} \times 8$ inches; see Nos. 1 and 2 of Set I, and No. 1 of Set II. On the other hand, there must have been also Pothis of enormous size, as shown by No. 5 of Set I, which appears to have had leaves about 11 inches broad and proportionately long, and by No. 7 of Set I, the leaves of which were $4\frac{3}{4}$ inches broad and probably about 20 inches long. In both cases the length can only be conjectured; but a fair idea of the size of such an enormous manuscript is afforded by the Petrovsky MS., which,

[2] See my *Epigraphical Note on Palm-leaf, Paper and Birchbark* in Journal, Asiatic Society of Bengal, vol. LXIX, p. 93 ff. (1900).

according to the photographic specimen published by Professor S. von Oldenburg in the Transactions of the Imperial Russian Archæological Society, Vol. VII, pp. 81, 82 (1892), measures about $3\frac{1}{2} \times 19\frac{1}{2}$ inches.

Characters.

All the Pothis are written in Brāhmī characters, but of two different types. One is an upright type, the other is slanting. The latter occurs only in two Pothis, *viz.*, No. 2 of Set I, and No. 1 of Set II. The difference of the two types is not so well seen in single letters, as in a whole page; compare figs. 1 and 2 of Plate II. There are also some specific differences in the formation of certain letters, especially in the forms of the vowels *a*, *ā* (initial) and *i* and *e* (medial) and the consonants *k*, *m* and *y*. They may be seen in columns 21 and 22 of Table II; and they are fully explained in my Reports in the Journal of the Asiatic Society of Bengal, Vol. LXII (1893), pp. 4, 5 and Vol. LXVI (1897), pp. 3–5, 45. The slanting type of Brāhmī has, so far as I know, never been observed in India: it appears to be a special Central Asian modification of the erect type which is proper to India. In India this type of the Brāhmī is known as the Gupta script, so named after the Imperial Gupta dynasty which ruled in Northern India about 319–530 A.D., and during whose rule, principally, it was current. Its period may be said to comprise roughly four centuries, from 300 to 700 A.D. From the fact that Pothis written in both, the upright and slanting, types were found in the Kuchar Stūpa, it is clear that they were contemporary styles of writing. It seems to me that the fact of the co-existence of the two types may be best explained by assuming that the Pothis in the erect script were written by Natives of India, Buddhist propagandists who had migrated to Central Asia, while the slanting script was evolved by such Natives of Eastern Turkestan as had become converts to Buddhism.

Their Varieties.

With regard to the upright type of Gupta, three distinct varieties can be distinguished. I believe the distinction to be a mark of a difference in age. The earlier variety, shown in Columns 7–12 of Table II, is found in Pothi No. 1 of Set I (Macartney MSS., No. 2); also in the Bower MSS., and in the Weber MSS., Parts I, II, III, (see Plate I, figs. 1–3 in Journal, Asiatic Society of Bengal, Vol. LXII of 1893), all of which belong to the Kuchar stūpa find. A later variety, shown in Column 18, is found only in the Pothi No. 6 of Set II; and another later variety, shown in Columns 16 and 17, is found in the remainder of the Pothis of the two Sets. Both these later varieties are quite unknown in India. They also share with the Central Asian slanting type the peculiar formation of the medial vowels *i* and *e*. Moreover the second of the two later varieties is marked by a curious angularity and absence of cursiveness, which suggests that

the script did not come naturally to the writer but was employed, so to speak, artificially as a calligraphic imitation of Indian models. This is particularly striking in the case of the letter *tha;* compare No. 9 in Col. 17 with Col. 6. The forms of the letters *e* and the initial long *ī* (No. 4 in Col. 17 and No. 3 in Col. 16) point in the same direction. The latter occurs occasionally (in the proportion of 1 : 8) as an alternative by the side of the more usual Indian form consisting of three ringlets (No. 3, in Col. 17), and is made by combining the sign of length of the *i*-vowel with the body of the *a*-vowel. The letter *e* is made by a similar combination. These peculiar forms of *e* and *i* are also found in the ordinary Tibetan script which originated in the middle of the 7th century A.D. For these reasons, I believe, the two later varieties to be peculiar scripts of Eastern Turkestan. I also believe them to belong to much the same period of time, and the variety, shown in Col. 18, to be the cursive script of the period, while the variety, shown in Cols. 16 and 17, is an artificial imitation of Indian models for calligraphic purposes. The same cursive script is also found in a series of Brāhmī documents, which are described in Group II (p. 32). It is shown in Column 19, and possesses the same peculiar form of the initial *i*-vowel. The form of the letter *ma* of this cursive script (No. 13 in Cols. 18, 19) should be particularly noticed: it is quite different from the ordinary form, but closely allied to the Central Asian forms, shown in Cols. 20-22. In this connection it may also be noticed that the Central Asian Gupta script retains the three-pronged form of *ya*, and the long-limbed form of *la* (Nos. 14 and 16 in Cols. 16–22). In the Indian Gupta these two forms began to disappear in the 6th century, and to be replaced by the two-pronged or boot-shaped form of *ya* and the short-limbed form of *la* (see Professor Bühler's Indian Palæography, pp. 45, 48).

Of the slanting type of Gupta, also, some varieties can be distinguished. Only one of them, however, (see Cols. 21, 22) is represented in the British Collection, in Pothis No. 2 of Set I, and No. 1 of Set II. Another, perhaps later, variety, distinguished by its form of the letter *ma* (the second form of No. 13 in Column 22), is found in a few fragments published by me in the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897), pp. 213 ff., Plate I, fig. x. A variety, intermediate between the upright and slanting, is found in the Weber MSS., Parts IV, V, VIII, published *ibidem*, Vol. LXII (1893), pp. 22 ff., and shown in Column 20.

Language.

The Pothis are written in two different languages: Sanskrit and another, which has not, as yet, been identified. Accordingly I have divided them, for the purpose of this Report, into two Sets. The first Set comprises seven

Pothis, all written in Sanskrit, not exactly of the classic, but of the so-called "mixed" type. The second Set consists of six Pothis, written in the unknown language. My impression, from the general character of the language, is that its identity has to be looked for in the direction of the monosyllabic Tibetan rather than of the Turki or Mongol languages. A curious point about it, as presented in these Pothis, is that it is largely intermixed with Sanskrit words, strangely misspelled. These words are mostly technical terms, medical or religious; and this fact seems to indicate that the works in which they occur may be translations of Sanskrit originals into the language of the country in which they were found.

Age.

None of the Pothis is dated. Their age, however, can be estimated with much probability from palæographic and other considerations. They are all written in one form or other of the Gupta script, and the period of this script is included roughly between 300 and 700 A.D. Three of the Pothis, *viz.*, Nos. 1 and 2 of Set I, and No. 1 of Set II, are said to have been found in the Kuchar stūpa, together with the Weber MSS. and the Bower MSS. These, therefore, may be taken to be practically of the same age. The date of the Bower MSS. it is possible to fix with tolerable certainty; for they are all written in the Indian (not the Central Asian) type of the Gupta script, doubtless, by Natives of India; and their age, therefore, is determined by the well-known facts of Indian palæography. I have explained the argument fully in a paper published in the Journal of the Asiatic Society of Bengal, Vol. LX (1891), pp. 79 ff. It is briefly this: the Gupta script of North-Western India has two signs for the consonant *y*, a three-pronged and a two-pronged or rather boot-shaped one (compare No. 14 in Columns 1 and 6 of Table II). Of these the boot-shaped sign is a later cursive development of the three-pronged one. There is also an intermediate cursive form, in which there is a line across the instep of the boot-shaped form (see No. 14 in Cols. 4 and 14, and the lower sign in Col. 12). This form was a transitional one which appears to have been current only during a very short period. This period, so far as epigraphic writing is concerned, extended from about 460–540 A.D. Epigraphical records avoided the use of contemporary new-fangled cursive forms: they naturally preferred to use only the older forms, sanctioned by long usage and, therefore, well-known to every reader; cursive forms were only admitted, when they had acquired the sanction of a fair amount of literary usage. Epigraphic writing thus lags behind literary writing: the interval, of course, may vary; but a generation or two of writers, say about 50 years, may fairly represent it. For Pothi-writing, therefore, the period of the use of the transitional

form of *y* would be the 5th century A.D. Accordingly, Pothis which use exclusively the old three-pronged form of *y* may be placed before the 5th century; and Pothis which use exclusively the modern boot-shaped form of *y* fall after the 5th century. Of course, the form of *y* is not the only test; the forms of other letters must also be taken into account; but in a general way, the *y*-test is a convenient and fairly safe one. In the present case, the result yielded by this test is sufficiently well confirmed by a comparison of the forms of the other letters shown in Table II. Parts I–III of the Bower MSS. show the use of the old and transitional forms of *y* in the proportion of 1: 3, while Parts IV–VII, which are written in a different hand, use only the old three-pronged form. As the last page of Part III, and the first page of Part IV, are written on the same leaf, occupying the obverse and reverse of it respectively, it follows that all the Parts are contemporary. It further follows that the Bower MSS. must have been written at a time when the use of the transitional form of *y* had not yet found general acceptance among literary men. Accordingly they must be referred to a time not later than the middle of the 5th century A.D. The other Pothis, *viz.*, the Weber MSS. and the Macartney MSS., having been found in the Kuchar stūpa together with the Bower MSS., must belong to nearly the same period. Hence Pothi, No. 1 of Set I, which is written in the Indian type of the Gupta script, but never uses the transitional form of *y*, must be dated early in the 5th century, and may possibly go back to the latter part of the 4th century (see the evidence in the Journal, Asiatic Society Bengal, Vol. LXVI, pp. 245–247). The Pothis, No. 2 of Set I, and No. 1 of Set II, which are written in the Central Asian type of Gupta, must also belong to the 5th century. The two-ringleted form of *y* (see No. 14 in Cols. 21 and 22 of Table II) which they use can only be viewed as having originated from the old three-pronged form: the boot-shaped form of *y* could not have produced it. The script of those two Pothis is a Central Asian modification of the contemporary Indian Gupta script. The intermediate stage—the Indian Gupta in the process of transition to the Central Asian—is exhibited in Part V of the Weber MSS. (see Column 20 of Table II; also Journal, Asiatic Society of Bengal, Vol. LXII (1893), Plate II, fig. 1). The transition can clearly be seen by comparing the forms of *m* and *y*, in Columns 20–22 of Table II. The North-Indian transitional form of *y* of the 5th century, and the modern boot-shaped form of *y*, which originated in the 6th century, never obtained a footing in Central Asia, as little as it penetrated into Tibet or into Southern India. The Bower MSS. found in Eastern Turkestan are only an apparent exception. For as their material—birch-bark—shows, those manuscripts were really written in India (probably Kashmir or Udyāna)

and imported into Eastern Turkestan. All the Pothis which were written in Eastern Turkestan itself are written on paper; and it appears probable that those written in the Indian variety of the Gupta script, such as No. 1 of Set I, were written by Natives of India who had settled in Eastern Turkestan, while those written in the Central Asian variety, such as No. 2 of Set I, and No. 1 of Set II, were written by Natives of that country.

As regards the Pothis, Nos. 3–6 of Set I, and Nos. 2–5 of Set II, I am disposed to ascribe them to a somewhat later age. They show the Indian upright Gupta script, but written in a curiously angular and artificial style: it is the calligraphy of epigraphical records applied to book-writing. The curious triangular form of *tha* and the wavy form of medial *e* first appear in Indian epigraphical writing in the 7th century (see Nos. 8 and 14 in Column 6 of Table II), and in Indian literary writing towards the end of the 6th century (see Nos. 8 and 14 in Col. 15). The peculiar composite forms of the initial *i* and *e* (No. 3 in Col. 16, and No. 4 in Col. 17) also belong to the 7th century. Accordingly it is to the 7th century that I am inclined to attribute the Pothis in question. The contemporary cursive style, I believe, appears in the fragment of Pothi No. 7 of Set I. It is shown in Column 16 of Table II and in figure 3 of Plate II.

To a still later period I would ascribe the Pothi No. 6 of Set II. It exhibits a much more developed cursive form of the upright Indian Gupta, as established in Central Asia. Unfortunately only a fragment of one leaf exists, and that in a rather bad condition. Its letters are shown in Column 18 of Table II and fig. 5 of Plate II. Essentially the same cursive script, however, is found in the series of Brāhmī documents which will be described in Group II (p. 32); and its letters are shown in Column 19 and fig. 6 of Plate II. These documents seem to have been found together with some Chinese documents dated in the latter half of the 8th century; and it is to this period that I would, accordingly, ascribe the Pothi No. 6 of Set II.

Evidence of History.

Two points which bear on the question of the age of the Pothis have already been discussed in the paragraphs on the "stringhole" and on "paper." The bearings on it of the course of the political history of Central Asia remain to be briefly considered. All the Pothis, so far as I know, are Buddhistic. Western Turkestan was occupied by the Muhammadans in the course of the 8th century. In 751 A.D. Samarkand was conquered by the Arabs. From that time Buddhist intercommunication between India and Central Asia practically ceased: it had previously been gradually declining. U-kong, a Chinese Buddhist monk, visited India in 753 A.D., and Prajña, an Indian Buddhist monk, visited China

in 782 A.D., both travelling through Central Asia. But these are solitary instances. In the 9th and 10th centuries Muhammadanism overran Eastern Turkestan; and Buddhist culture fell into rapid decline. That under these circumstances, such a knowledge and practice of the Indian script as to produce manuscripts of the perfect calligraphy shown in our Pothis should have continued to exist among the Buddhists of Eastern Turkestan is extremely improbable.

First Set.

This Set comprises seven Pothis, all written in Sanskrit.

No. 1. Pothi. (Plate II, fig. 1).

Belongs to M. 1. Fully described and figured by me (as Set II) in the Journal of the Asiatic Society of Bengal, Vol LXVI (1897), p. 244, plate x. Incomplete both in size and number of leaves. Maximum existing size $2\frac{1}{8} \times 4\frac{1}{2}''$; original, about $2\frac{1}{8} \times 5''$. Number of lines on page, 9 or 10. Leaves mutilated on the right: stringhole on the left: existing 25, numbered from 20 to 44, on the reverse pages, as shown by the way the leaves adhered to one another. Enclosing boards of wood preserved; size, $5\frac{3}{8} \times 2\frac{1}{2}''$; stringhole at $1\frac{3}{8}''$ from left edge; inner surfaces flat, outer, slightly convex and polished. Paper, same as in No. 1, but discoloured (dirty orange) and rotten from damp. Writing much damaged through surface-coating peeling off or causing leaves to stick together. Findplace, stūpa near Kuchar where it is said to have been dug out together with the Bower MSS., and Weber MSS. (Introd., pp. x, xi). Script, Indian upright Gupta characters. Language, mixed Sanskrit prose and verse (*çloka*). Subject, medical or semi-medical treatise, divided into *adhyāyas* or chapters. Age, early 5th or late 4th century A.D.

No. 2. Pothi. (Plate II, fig. 2).

Belongs to M. 1. Fully described and figured by me (as Set I) in the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897), pp. 237, 241, plates ix and x. Incomplete, both in size and number of leaves. Existing size, $2\frac{1}{2}'' \times 5''$, original, $2\frac{1}{2} \times 7\frac{1}{2}''$. Number of lines on page, 6. Average number of akṣaras, or letters, in a line, 22; missing, about 12; total about 34. Leaves mutilated on the left, and hence stringhole and leaf-numbers lost. Commencing and concluding leaves missing; existing number, 17; in the Petrovski Collection, in St. Petersburg, 8; in the Weber Collection in my own possession, 7; total 32 leaves. (But see Professor S. v. Oldenburg's remarks in the Records of the Oriental Transactions of the Imperial Russian Archæological Society, Vol. XII, page 034). Paper, primitive without waterlines and

starch-loading; of whitish colour. Writing, much obliterated through peeling off of surface coating of paper. Findplace, same as of No. 1. Script, Central Asian slanting type of Gupta characters. Language, mixed Sanskrit prose. Subject, Buddha's discourse with the Mahāyakṣa Māṇibhadra, whose story is briefly told in the Saṁyutta Nikāya (Pāli Text Society, Part I, p. 203). Age, 5th century A.D.

No. 3. Pothi.

Belongs to G. 1. Described (not quite correctly) and figured in Journal, Asiatic Society of Bengal, Vol. LXVI (1897), pp. 227, 231, plates ii and iii. A mere fragment of the book, only two complete leaves, and two small pieces of a third, surviving. Size, $11 \times 2\frac{1}{2}''$. Number of lines on page, 5, with about 27-30 akṣaras in a line. Stringhole at $2\frac{3}{4}''$ from left edge, within a circle of $\frac{7}{8}''$ diameter. Leaves numbered 9 and 11 (not 19 and 11 as stated in the Journal) on the obverse pages. Paper, very similar to that of the Chinese and Brāhmī documents (see Group II, p. 32), of whitish colour, and with waterlines, about 14 to an inch, running parallel with length of leaf and in same direction as writing. Find-place, said to be "old buried city in vicinity of Kuchar" but perhaps Dandan Uiliq (see p. 31). Script, upright Gupta characters of the Central Asian calligraphic variety. Language, mixed Sanskrit prose. Subject, *dharaṇīs* or incantations, divided into sūtras, as follows: sūtras 72–80 on leaf 9, and 90–93 on leaf 11. On leaf 10, there must have stood sūtras 81–89. As the fragmentary leaf commences a page with sūtra 41, and as there stood, on the average, eight sūtras on a leaf, it follows that the fragmentary leaf must be the 5th, and must have borne sūtras 41–48. Age, probably 7th century A.D.

No. 4. Pothi.

Belongs to G. 7, T. 1, and M. 3. A mere fragment of the book, consisting of four more or less complete leaves, and five small pieces of three or four leaves. Probable full size, $2\frac{1}{2} \times 11\frac{1}{2}''$. Number of lines on page, 4, with about 21–27 akṣaras in a line. Stringhole at $2\frac{3}{4}''$ from left edge, within a circle of $\frac{7}{8}''$ diameter. Two leaves numbered 8 and 27, but uncertain whether on obverse or reverse pages. Paper, as in No. 3, but with waterlines about 13 to an inch, running parallel to longer side of leaf, in all but three of the small pieces in which they number 16 to an inch and run parallel to the shorter side and across the writing. Findplace, probably, the same as of No. 3. Script, and language, as in No. 3. Subject, apparently the same as in No. 1. Age, as of No. 3.

No. 5. Pothi.

Belongs to G. 1. Described and figured by me in Journal, Asiatic

Society of Bengal, Vol. LXVI (1897), pp. 228, 233, and plate iv, No. 3. A mere fragment, $3\frac{5}{8} \times 5\frac{3}{4}''$, of a very large leaf, numbered 90 on left margin, but unknown whether on obverse or reverse page. Leaf-numbers, as a rule, stand in or near the middle of the margin, and, as in this case, the number 90 stands close to the torn upper edge, it is probable that the existing breadth ($5\frac{3}{4}''$) is only about one-half of the original size which should have been about 11 inches. The leaf must have had a corresponding length, but there is no means of determining it. The Pothi must have been a very large one, both with respect to size and number of leaves. Stringhole must have been in missing portion. Existing number of lines on page, 7; probable full number 14. Letters, very large, $\frac{1}{4}$–$\frac{3}{4}''$. Paper, as in No. 3, but with 13 waterlines to an inch. Findplace, script and language, as of No. 3. Subject, not determinable. Age, as of No. 3.

No. 6. Pothi.

Belongs to M. 3. Only two very small irregular pieces ($1 \times 3''$ and $1\frac{1}{4} \times 1\frac{1}{2}''$) of one or two leaves. Original size of leaf unknown. Portions of two lines on one, and of three lines on the other fragment. In all other respects, the same as No. 3.

No. 7. Pothi. (Plate II, fig. 3).

Belongs to M. 10. A mere fragment, out of the middle of a very large leaf, inscribed on both sides with 9 lines of writing. The still existing full breadth is $4\frac{3}{4}''$; full length, unknown; surviving length, $6\frac{1}{2}''$. Paper, same as in No. 3. Findplace, unknown. Script, ordinary or cursive variety of Central Asian upright Gupta characters. Language, mixed Sanskrit. Subject, apparently a Buddhist sūtra. Age, probably 7th century A.D. The following is a transcript of what is legible on the figured page.

l. 1 va · sarvva-dharmaṁ Buddha-lakṣaṇa (çūnye) × sarvva-vi
l. 4 bhadante=ti · āyuṣmāṁ n=Subhuti
l. 5 prajñā-pāramitā yā× ×ṇa: sambodhi manasi kārai
l. 6 sad-dhetos=tathā hi subhūto tena bodhisatve
l. 7 s=tathā hi × çūnyatayā
l. 8 s=tathā hi (sa pratyati) çūnya
l. 9 kathāyāṇa

Second Set.

This Set comprises six Pothis, all written in a language, not yet identified.

No. 1. Pothi.

Belongs to M. 1. Fully described and figured by me (under Set I)

in Journal Asiatic Society of Bengal, Vol. LXII (1893), p. 34 ff., and plate iii, figs. 3–5. It is the missing portion of Part IX of the Weber MSS., which previously had not been recognized by me but supposed to belong to No. 1 of Set I. It comprises 17 leaves; in Part IX, there are 25 leaves; the total thus amounts to 42 leaves. The finder (see Introduction, p. x) appears to have divided it into two parts, one of which he gave to Mr. Weber, the other, to Mr. Macartney. It is not probable, that, for this purpose, he picked out the leaves separately; he probably simply divided the bundle of leaves into two portions, each consisting of a number of consecutive leaves. This being so, and leaves 7–10 and 30–38 occurring in the Weber Collection, while leaves 22–29 are included in the Macartney Collection, it follows that the 17 leaves of the latter collection probably comprise the leaves 13–29, while the 25 leaves of the Weber Collection are made up of the initial portion 1–12 and the final portion 30–42. Unfortunately, the Pothi is preserved in a very indifferent condition. The leaves are partially mutilated on three sides though sufficient remains to determine their full size, which is $2\frac{1}{2} \times 5\frac{1}{2}$ inches. Number of lines on page, 6; the top-lines, chiefly, being damaged. The writing is much obliterated, owing to the gypsum coating of the leaves being greatly damaged. In many places the coating of one leaf, with the letters on it, adheres to the next leaf, and on carefully rubbing off the gypsum, the letters underneath it become visible, though in an inverted position and crossing the letters of the writing on the next leaf. With some trouble, it is possible to distinguish and read the two lines of writing overlying one another. A complete transcript (in Roman) of this manuscript, with indexes, is given in an Appendix to this Report. The leaf-numbers are on the left margin of the reverse pages, the following being, more or less completely, preserved: 22, 24, 26, 27, 29. Paper, findplace and script, the same as in No. 2 of Set I. Language, not identified, but largely intermixed with strings of Sanskrit names of medical drugs, strangely misspelt. Hence it is not improbable that the work may be an ancient translation into a Central Asian dialect, of some Indian medical treatise. Age, 5th century A.D.

No. 2. Pothi. (Plate II, fig. 4).

Belongs to G. 7 and M. 3. A mere fragment of a book, consisting of three nearly complete leaves, one half-leaf, and eight small pieces. Size of full leaf, $2\frac{1}{2} \times 11\frac{3}{16}$.″ Number of lines on page, 5, with about 21–28 akṣaras in a line. Stringhole at $2\frac{3}{4}$″ from left edge, within a circle of $\frac{3}{16}$″ diameter. On one leaf, in left upper corner, there are two concentric circles, not inscribed, of $1\frac{1}{2}$″ and $1\frac{3}{4}$″ diameter, possibly marking the commencement of a chapter. One of the complete leaves

is numbered 1 on left margin of reverse page, with blank obverse, being the initial leaf of the book; numbers of others missing. Paper, as in No. 3 of Set I, but waterlines running parallel with short side in leaf 1 and in the eight small pieces. Findplace, unknown. Script, the same as in No. 3 of Set I. Language, not identified, intermixed with Sanskrit religious terms. Subject, probably Buddhist *dharaṇīs* or "incantations." Initial leaf apparently commences with *oṁ siddhaṁ*, the former word represented by a large flourish, the latter indicated by traces of *s* and *dh*. Age, same as No. 3 of Set I.

No. 3. Pothi.

Belongs to G. 7. A mere fragment of the book, consisting of one complete leaf, and the larger portion of another, numbered 9 and 10 respectively on the left margin of the obverse pages. Size of full leaf, $2\frac{7}{8} \times 14\frac{1}{4}''$. Number of lines on page, 5, with 32 or 33 akṣaras in a line. Stringhole at about $3\frac{1}{2}''$ from the left edge, within a circle of $\frac{15}{16}''$ diameter. On leaf 9, in left lower corner of reverse page, two concentric circles, not inscribed, of $1\frac{3}{4}''$ and $1\frac{5}{8}''$ diameter respectively (as in No. 2). Paper, stiff, of yellowish colour, with faint waterlines, about 11 to an inch, running parallel to long side of leaf and direction of writing. Findplace, unknown. Script, as in No. 3 of Set I. Language and subject, as in No. 2 of Set II. Age, probably 7th century A.D.

No. 4. Pothi.

Belongs to G. 1. Described and figured by me in Journal, Asiatic Society of Bengal, Vol. LXVI (1897), pp. 228, 234, and plate iv, fig. 5. Only a fragment of one leaf: full breadth extant $3\frac{3}{4}''$; full length unknown; existing length, 6"; apparently from middle of leaf; for no stringhole visible. Number of lines on page, 5. Paper, as in No. 3 of Set I, but waterlines parallel to short side of leaf, and transverse to writing. Findplace, script, and subject, also the same as in No. 3 of Set I; but language, as in No. 2 of Set II. Age, probably 7th century A.D.

No. 5. Pothi.

Belongs to G. 1. One of the two fragments referred to by me in Journal, Asiatic Society of Bengal, Vol. LXVI (1897), pp. 228, 229. The leaf to which it belongs—the only one surviving—must be the last, seeing that one page is blank, and the stringhole is on the left side. Breadth complete, $2\frac{1}{2}''$; full length unknown, but probably about 7"; existing length, $4\frac{3}{4}''$. Stringhole, within a circle of $\frac{3}{4}''$ diameter, at about $1\frac{1}{4}''$ from existing left edge; on this side only a very narrow strip, with the leaf-number, can be lost, the main loss being on the right side. Number of lines on page, 5; writing almost illegible. Paper, as

in No. 3 of Set I, but very thin, and with waterlines parallel to short side of leaf. Findplace, script, language, subject and age, as in No. 4 of Set II.

No. 6. Pothi. (Plate II, fig. 5).

Belongs to G. 1. The other of the two fragments referred to in the preceding No., and a parallel case in almost every respect. The leaf to which it belongs—the only surviving-one of the book—must be the last, as one page is blank, and the stringhole is on the left side. Breadth complete, $2\frac{1}{2}''$; full length unknown, but probably about 6 inches; existing length $3\frac{3}{4}''$. Stringhole, within a circle of $\frac{3}{4}''$ diameter, at about $1\frac{1}{2}''$ from existing left edge; possibly not more than right and left margin, with leaf-number, missing. Number of lines on page, 5; writing almost illegible. Paper, exactly as in No. 5 of Set II. Script, later cursive variety of Central Asian upright Gupta; but very much obliterated. Language and subject, unknown. Age, probably 8th century A.D.

Second Group. Documents.

The documents of the collection may be divided into two classes, according as they are written in a known or in an unknown language.

First Class. Documents in a Known Language.

First Set. Chinese Documents. (Plates III and IV).

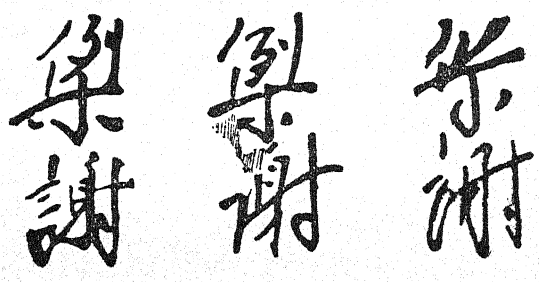
Number, Script and Language.

This Set comprises three complete sheets and nine fragments of paper, inscribed on one side with writing in Chinese characters, and, therefore, in vertical lines or columns, running from right to left. The characters are the ordinary Chinese, but in two different hands: the book-hand or *kyai-shu*, and the cursive or *tsao-shu*. The style of the writing according to Mr. Macartney, resembles that of the period of the T'ang dynasty, that is, 618-907 A.D.; and this is confirmed by the actual dates recorded in two of the documents (Nos. 1 and 3), as well as by the circumstance, that some of the characters are more or less obsolete. The language is Chinese, but archaisms as well as more or less extensive mutilations of the documents offer serious obstacles to accurate translations. Mr. G. Macartney, Special Assistant for Chinese Affairs to the Resident in Kashmir, in Kāshghar, and Mr. L. C. Hopkins, H.B.M.'s Consul in Chifu, have very kindly supplied me with translations of some of them, and Professor F. Hirth in Munich, and M.M. U. Wogihara and R. Watanabe with some others. I hope their publication in full may be undertaken by some Chinese scholar. Here I must limit myself to indicating their general purport.

Find-place.

Nothing definite is known regarding their exact find-place. Two fragments, Nos. 4 and 10, which were received by Captain Godfrey from some Pathān traders, are said to have been dug up, together with the Pothis Nos. 3 and 5 of Set I and Nos. 4, 5, 6 of Set II, "near some old buried city in the vicinity of Kuchar." All the other documents were obtained by Mr. Macartney from a Khotan trader, Badruddīn, who either could not or would not give any information regarding their find-place. There is, however, some reason to believe that they may have come from Dandan Uiliq (see below, p. 31). The three complete documents name the place where they were written, but unfortunately, the first of its two letters being obsolete, it cannot at present be fully read. Full-size facsimiles of the two letters, as seen in the three documents, are shown in the marginal woodcut No. 2. Mr. Macartney and his Chinese Literate read it *Lĕĕ-Sieh*. Mr. Hopkins also reads it *Lieh-sieh* or *Li-sieh*, but he adds, that not only the sound of the first character is doubtful, but "the second character may represent an older sound *sia*, *tsia*, *zia*, *tsa*, *tse*, and the whole word might be *Lizia* or *Litsa* or *Lidja*." From the document No. 1 it is certain that the place, whatever it was, was situated in the Chinese province of the "Six Cities" (*Liu-Ch'eng*) or, by its Turki name, *Alti Shahr*, that is, in the country now commonly known as Eastern or Chinese Turkestan. The Six Cities probably are Kuchar, Aksu, Ush-Turfān, Kāshghar, Yarkand, and Khotan, with their respective territories.[3]

No. 2.



[3] A slightly different enumeration is given by Mr. N. Elias in the Translation of the Tarikhi Rashidi, p. 51. There Yangi Hissar is substituted for Kuchar, which, as said on p. 53, "was usually a dependency of Aksu." The enumeration may have varied at different times, or with different informants. Mr. Elias' enumeration is based on a statement of Dr. Bellew's in the "Report of the Yarkand Mission in 1873," p. 185. That Report, however, on page 33, refers also to another enumeration *Alti Shahri Khutan* or "Six Cities of Khutan," so called "from the six towns composing it, *viz.*, Ilchi, Karakash, Yurungkash, Chira, Kirya, and Naya." In any case, as our document shows, *Alti Shahr* or "Six Cities" is not a modern term, as Mr. Elias (*l.c.*, p. 51, footnote: "it belongs to the present century") seems to have inferred from the statements of the Report, but goes back to a very ancient date.

Purport and Date.

All the manuscripts appear to be official documents of a public or private character. They seem to have belonged to the registry of some local or sub-provincial office of the Chinese Government of the province of the "Six Cities" or Eastern Turkestan. Thus one of the complete documents (No. 1) is a letter from a local officer to his Superior, requesting instructions regarding the collection of certain taxes: it is dated in the 3rd year of the Tali period, *i.e.*, in 768 A.D. It is not the original dispatch, but merely the office copy or draft, as shown by the large office stamp imprinted on it. This circumstance may account for the absence of any seal, which would probably be borne by the original. Another (No. 2) is a requisition order to a military officer for the supply of certain articles. This is not fully dated; the year is not mentioned, but only the day and month. The third complete document (No. 3) records a private transaction, being the deed of a loan of money, and is fully dated in the 7th year of the Chin-chung period, *i.e.*, in 786 A.D. This, as well as the Tali period, belong to the reign of the T'ang dynasty, which extended from 618 to 907 A.D. The fragments appear to be official receipts of taxes paid, or requisition orders for the supply of various articles. In one of the fragments (No. 4) there occur some letters of the cursive Brāhmī script, in which the Brāhmī documents of Set I, of the Second Class are written. This circumstance proves that the latter set and the Chinese set of documents belong to the same period of time, *viz.*, the second half of the 8th century A.D.

Paper.

The material on which the documents are written, is water-lined paper of the same quality as that of the Pothis Nos. 5 and 6 of Set II; and this agrees with the circumstance that on palæographic grounds Pothi No. 6 must be referred to the 8th century A.D. (see page 15). It is a very thin, coarse paper, of uneven texture, and whitish color. The water-lines form a network, being 13 or 14 to an inch in one direction, crossed at right angles by others in intervals of from $\frac{3}{4}$ to 1″. Evidently, the paper was made in a mould with a network bottom. On this an imperfectly prepared pulp was laid rather unevenly; for the paper shows great inequalities, thicker patches alternating with thin ones. In the thick patches, long fibres of the material can be clearly distinguished. What this material was, I am unable to say: specimens have been submitted, for determination, to Hofrath Professor J. Wiesner in Vienna. According to him loading with starch was used in the manufacture of the paper.[4] To judge from the dimensions of the documents, the size of the mould, and accordingly of a full sheet of paper, appears to have been

[4] The dated documents show an appreciable amount of starch; in some of the fragments no starch could be discovered.

about 16 × 12 inches. The closely spaced water-lines run parallel to the longer side, while the writing runs across them, and parallel to the widely-spaced transverse water-lines. The surface of the paper is rough: polishing it or coating it was not practised. The writing was done with a brush: the ink appears to have been the so-called China or Indian ink.

No. 1. Document. (Plate III).

Belongs to M. 9. Size, $15\frac{1}{2} \times 11\frac{1}{4}''$, or a full sheet of paper. Lower right-hand corner torn off, also some portions of upper edge; otherwise complete. Writing arranged in 14 columns, six of them more or less mutilated, in ordinary Chinese book-hand, though interspersed with a few cursive characters. At the end, in left-hand lower corner, the office stamp *Tsing*, meaning "approved," is imprinted, in a very large character, $2\frac{1}{4}''$ high; while all the written characters are from $\frac{1}{2}$ to $\frac{3}{4}''$ high.

The document is dated "the 23rd day of the 3rd month of the 3rd year of the Tali period," equivalent to A.D. 768. It is an official letter addressed by Tien Ch'eng-hsien, apparently the officer in charge of Li-sieh or Litse to his superior officer, Ah-mo-chih Wei-chih, the Inspecting Superintendent of the Six Cities. Ah-mo-chih is said, by Mr. Macartney, to be not Chinese, but probably a Chinese transliteration of a native word. The following appears to be the substance of the letter: Tien Ch'eng-hsien reports that he has received a petition from the people of Li-tse regarding the payment of their grain-tax. He explains that owing to the frequent depredations of bandits they are suffering great distress. Accordingly he proposes a postponement of the collection of the tax, and requests the sanction thereof by the Inspecting Superintendent.

No. 2. Document.

Belongs to M. 9. Size $5\frac{3}{4} \times 11\frac{1}{4}''$, or about one-third of a full sheet (such as No. 1) cut breadthwise. Record, complete. Writing arranged in six columns, parallel to the long side, in the book-hand. No office stamp. Dated only on "the 23rd day of the 12th month," without mention of any year, from the Li-sieh (Litse) camp. Purport, order addressed to Yang Chin-ching, the military commandant of the camp, to requisition a skin to re-cover a drum, and feathers to re-fit arrows.

No. 3. Document. (Plate IV).

Belongs to M. 9. Size, $13\frac{1}{4} \times 11\frac{1}{4}''$, being nearly a full sheet. Complete, with exception of one-half of first column or about 7 characters. Writing arranged in 12 columns, parallel to short side, in cursive characters; hence partially undeciphered. No office stamp. Dated twice, at beginning and end, "on the 5th day of the 7th month of the 7th year of the period Chien-chung," corresponding to A.D. 786. Purport:

record of the loan of 15,000 cash, on the security of a house and a person. Signature, the marks of the borrower (Sumenti, aged 39) and his surety (Ngan, aged 30), being three dashes (≡) and two crosses $\binom{+}{+}$ respectively. Place of transaction, apparently a village (name not deciphered) near Li-sieh (Litse).

No. 4. Document.

Belongs to G. 1. Described and figured by me in the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897), p. 230, Plate viii. No. 16. Said to have been dug out from a buried town near Kuchar, Size, $5\frac{7}{8} \times 2\frac{3}{4}''$. Oblong slip, torn at top; on other sides complete. Writing, in three columns, parallel to long side, in book-hand. Between first and second column, near the top, three Brāhmī letters रो हौ डे *ro-hau-ḍe*, running parallel to columns, but to be read horizontally, from left to right, of the same cursive type as in the Brāhmī documents of Set I, in Class II and in the Pothi No. 6 of Set II. Purport, certificate of payment of taxes. Date, "the 26th day of the month;" rest mutilated. Mr. Macartney (letter, 28th October, 1897), states that the Chinese characters "resemble what is known as the writing of the Yen family of the T'ang dynasty (618–907 A.D.), but that the style of Chinese writing rarely offers a clue to age." The two circumstances of the occurrence of the cursive Brāhmī script by the side of the Chinese, and of the general resemblance, in externals, of No. 4 to the dated Nos. 1 and 3 practically seem to fix the date of No. 4 as some year in the latter half of the 8th century A.D.

No. 5. Document.

Belongs to M. 3. Size, $6\frac{7}{8} \times 3\frac{1}{2}''$; an oblong slip, rather damaged on two sides, but otherwise apparently complete. Writing, in two columns, parallel to long side, in book-hand. Purport, apparently notice of certain articles, sent to a person called *O-hon*.

No. 6. Document.

Belongs to M. 3. Fragment. Size, originally $4 \times 4\frac{1}{2}''$, now $4 \times 2\frac{3}{8}''$, a blank portion having been sent to Professor J. Wiesner of Vienna, to be tested. Writing, in one column, mutilated at top and bottom, in book-hand, but slightly cursive. Purport, apparently a receipt or order for certain goods.

No. 7. Document.

Belongs to M. 3, Size, $3\frac{1}{2} \times 2\frac{1}{2}''$, a much torn fragment, apparently from the bottom of sheet, with remains of bottom of three columns of writing, in a somewhat cursive book-hand. Purport, apparently certificate of payment of grain-tax for military use.

No. 8. Document.

Belongs to M. 3. Size, $7 \times 2\frac{3}{4}''$, a much torn fragment from middle of sheet, with remains of two columns of writing, in book-hand; one in small characters; the other to the left and, therefore, at the end of the document, consisting apparently of two very large characters, about $2\frac{1}{2}$ inches high, probably an office-stamp. Purport, illegible. Paper, rather thicker than in preceding Nos., but water-lined.

No. 9. Document.

Belongs to M. 3. Size, $6\frac{1}{2} \times 1\frac{1}{2}''$, a very irregularly torn fragment from middle of sheet, of same paper as No. 8, and possibly another portion of the same document. Writing, remains of two columns, in book-hand. Purport, apparently military requisition order.

No. 10. Document.

Belongs to G. 1. Described and figured by me in Journal, Asiatic Society of Bengal, Vol. LXVI (1897), p. 230, Plate viii, No. 17. Said to have been dug up from a buried town near Kuchar. Size, about 5" square, being the right-hand upper corner, torn off a larger sheet. Paper thicker and coarser than that of any preceding No., but also water-lined. Writing, top of three columns; also traces, on the right, of a fourth column; the beginning and bottom of text wanting. Purport, not intelligible.

Nos. 11 and 12. Documents.

Belong to M. 3. Sizes, $4 \times 2''$ and $1\frac{1}{4} \times \frac{3}{4}''$. Two small and very irregular fragments from middle of sheet; of same paper as No. 10, and possibly belonging to the same document. On No. 11 indistinct traces of two columns of writing; on No. 12 only one character; all in book-hand. Purport, illegible.

Second Set. Persian Documents.

Number, Find-place and Condition.

This Set comprises four paper documents, all incomplete, two being only very small fragments. They were procured by Mr. Macartney from Khotan, but their exact find-place is not known. They were received with a large number of others, in the same condition as, the Godfrey MSS. (see Journal, Asiatic Society of Bengal, Vol. LXIII p. 226), forming crumbled up lumps of waste paper, and required very careful unfolding and smoothing-out. When this was done, they were found to be records written, some in Persian, others apparently in Uigur (see *infra*, Set I of Class II).

Paper.

The paper on which they are written was also made, like that of the Chinese and Brāhmī documents, in moulds with a network bottom; for it has water-lines, 13 or 14 to an inch, with transverse lines, about $1\frac{1}{4}''$ apart. It is also of whitish colour; but it has a very different texture. While the other paper is extremely thin and comparatively hard, this is somewhat thicker, and of an extremely soft and frail quality, resembling thin, loose flannel: it must have been made of other material, though what this was has not yet been determined by Hofrath Professor J. Wiesner, to whom specimens have been submitted. He has, however, found that, unlike the paper of the Chinese dated documents, no loading with starch was used in its manufacture. The paper shows transverse marks of fracture, as if the documents had been folded into narrow folds, about $1\text{-}1\frac{1}{4}''$ wide. In its present condition, the paper is so flossy that it is difficult to see how it could be written on with any hard instrument such as a reed-pen, unless originally it was of a firmer texture, or the writing was done with a soft brush. The writing is all on one side of the paper, except in one of the fragments (No. 4) which shows it on both sides. It also runs invariably transverse to the close-spaced water-lines.

Script, Language, Date and Purport.

The documents have been examined by the Rev. D. S. Margoliouth, Laudian Professor of Arabic in Oxford, who has kindly undertaken to publish them *in extenso* in some Oriental Journal. They are written in the Naskhī character, and in Persian language; and according to Professor Margoliouth, they are the earliest specimens of writing of that kind in prose. One of them (No. 1) is dated in H. 401, equivalent to A.D. 1010-11; and to judge from their close resemblance to one another and their common *provenance*, it is probable that they all belong to the earlier half of the 11th century A.D. Two of the documents are certainly, and one of the fragments probably, deeds recording sales of land: the purport of the other fragments cannot be determined.

No. 1. Document. (Plate V, fig. 1.)

Belongs to M. 10. Size, $16\frac{1}{5} \times 6\frac{3}{4}''$, the length being complete: as a comparison with the Document No. 2, which possesses the full breadth, shows, the entire sheet must have measured $16\frac{1}{5} \times 11\frac{1}{2}''$. Accordingly a strip, about $3\frac{3}{4}''$ wide, is lost on the left side: top, bottom, and (practically) right side are intact. Inscribed, only on one side, with 16 lines, running parallel to the narrow edges.

The document purports to be the record of the sale of certain land at Almatah, a village in Nikotanj (الماته روستهٔ در نکو تنج, 4th line) to Yaḥyā son of Ayūb. It is dated in words, Hijrah 401, equivalent to

A.D. 1010-11 (تاريخ سال چهارصت يک از هجرت النبي 12th line). Seven witnesses are named: (1) Zakariyya, son of Likokongi, (his mark) + + ; (2) Ḥasan, son of Likokongi, mark lost; (3) Ya'qūb, son of Sirkuwā Sipāsi, (mark) + ; (4) Omar, son of Qela' Sipāsi, mark lost; (5) Maḥmūd, son of Qela' Sipāsi, (mark) + ; (6)—, son of Qela' Sipāsi, (mark) + ; (7)—, son of Karā, (mark) ⊟. Their names are Arabic, indicating that they were Muḥammadans: their fathers' names are Turki (readings uncertain), and they are described as members of the Sipāsi (سپاسي), a non-Islamitic, sect. All seven were illiterate persons, as shown by their affixing their marks in lieu of signing their names.

The date of the document refers it to the reign of the great Yilik Khān, *alias* Ḥaẓrat Sulṭān Satūq Bughrā Khān, who is said to have lived H. 333-429 (A.D. 944-1037) to the age of 96 years. Three silver coins of his (dated 1003, 6, 7) are in the British Collection and are described in Part I, page 29. He was the founder of a very extensive, but short-lived, Uigur kingdom, with its capital at Kāshghar. In his time, the first permanent introduction of the Islam into Eastern Turkestan took place. Tradition says that his father Tangri Kadir Bughrā Khān was still an "idolater"; so was his uncle and immediate predecessor, Harūn Bughrā Khān. He himself is said to have adopted the Islām when he was twelve years old, and to have been the first convert to Muḥammadanism in Eastern Turkestan.[5] This is precisely the religious state of things disclosed by the signatures to the contract.

The document, further, proves the existence of the Sipāsi sect in Eastern Turkestan as early as the beginning of the 11th century. The Dabistān contains a long account of the history of the sect and its tenets. It is said to be a survival of the old Iranian religion. Its home, accordingly, should be Western Turkestan, whence it might easily spread into Eastern Turkestan. It also spread into India where the author of the Dabistan says he met one of its leaders, Azar Kaivan, in Patna, early in the 17th century. The claim to antiquity of the sect, as well as of its sacred book, the Dasatir, which has been much questioned, would seem to receive considerable support from the present document.

No. 2. Document.

Belongs to M. 10. Size, $8\frac{1}{2} \times 11\frac{1}{2}$, being the complete lower half of the sheet. Inscribed with ten lines of Naskhī writing, which, however, in some parts is almost illegible owing to the damaged state of the exceedingly frail paper. It is also a deed of sale of land, the details of which, together with the date, are partly illegible, partly lost with the upper portion of the document. The extant lower part gives the names

[5] See Sir T. D. Forsyth's *Report on a Mission to Yarkand in 1873*, pp. 122 ff.

and marks of the witnesses. The date must be much the same as that of No. 1.

No. 3. Document.

Belongs to M. 10. Size, $2 \times 3''$. A fragment, being the lower right-hand corner of the sheet, with remains of five or six lines. Purport, probably deed of sale of land, similar to Nos. 1 and 2.

No. 4. Document.

Belongs to M. 10. Size, $2 \times 1\frac{1}{4}''$. A small fragment, from the lower edge of the sheet, inscribed on each of the two sides with the remains of two lines of writing in Naskhī characters. Purport uncertain; perhaps a letter.

SECOND CLASS. Documents in an Unknown Language.

First Set. Uigur Documents. (Plate V).

Number, Find-place, Condition and Paper.

This Set comprises 24 specimens. All, except one (No. 1), are incomplete; many are very small fragments. They were obtained from the same place and in the same condition as the Persian documents. Their paper is also of the same kind; very soft, water-lines are rather faintly visible; there are also the same marks of fracture, indicating folding or transverse water-lines.

Script and Language.

The writing on them runs in horizontal lines, from the right to the left, and seems to be in the Uigur character. In that case, probably the language also is Uigur; but this point must wait for further enquiry. The writing, which varies much in size, in different specimens, is, as a rule, found only on one side of the paper; but one large piece, and a number of very small fragments, all possibly belonging to the same document, are inscribed on both sides.

Date and Purport.

Seeing that they were found mixed up with the Persian documents of the 11th century A.D., it is probable that they are referable to the same date. For the same reason it is also probable that they are documents of a similar kind. On one of them the names and marks of illiterate witnesses can be seen (Plate V, fig. 3); and this probably is a similar deed of sale of land. Some seem to bear counter-signatures or office-marks in Arabic (Plate V, fig. 2).

No. 1. Document. (Plate V, fig. 2).

Belongs to M. 10. Size, about 6″ square. Complete. Inscribed, on one side only, with six lines of writing in small characters. At

the bottom apparently an Arabic counter-signature. As shown by the transverse marks of fracture in the paper, the document may have been originally folded up in eight narrow folds, about $\frac{3}{4}''$ wide. Purport, unknown.

No. 2. Document.

Belongs to M. 10. Size, $7\frac{1}{2} \times 4\frac{1}{2}''$. Irregular fragment; complete at bottom. Inscribed, only on one side, with eight mutilated lines of small writing, followed by a 9th line in Arabic characters. Purport unknown.

No. 3. Document.

Belongs to M. 10. Size, about 6″ square. Fragment, being the right-hand lower corner of sheet. Inscribed, on one side only, with six mutilated lines of large writing. Purport, unknown.

No. 4. Document.

Belongs to M. 10. Size, $7\frac{1}{2} \times 3\frac{1}{2}''$. Very irregular fragment, from middle of sheet. Inscribed, on one side only, with 8 mutilated lines of large writing. Purport, unknown.

No. 5. Document. (Plate V, fig. 3).

Belongs to M. 10. Size, $5 \times 2\frac{1}{2}''$. Fragment; left-hand lower corner of sheet. Inscribed, only on one side, with nine mutilated lines of large and small writing; also with a cross (+) and a crossed circle (⊖), being the marks of two illiterate witnesses. Purport, probably a record of some sale.

Nos. 6–12. Documents.

Belong to M. 10. Very small and very irregular fragments, from middle of several sheets, inscribed with remains of large (Plate V, fig. 4), and small writing, some of them, possibly, being portions of the previously described numbers.

No. 13. Document.

Belongs to M. 10. Size, $7 \times 3''$. Fragment, complete on left, but irregularly torn on the other sides. Inscribed, on both sides, with eleven or twelve mutilated lines of small writing, running in opposite directions on the two sides. Purport, unknown.

Nos. 14–24. Documents.

Belong to M. 10. Minute fragments of very irregular shape. Inscribed on both sides with traces of small writing. All of them, perhaps, portions of No. 13.

Second Set. Brāhmi Documents. (Plates VI and VII).

This Set comprises 69 specimens. Among them there are thirteen sheets, which are entire or nearly so, and of which one belongs to M. 3,

eight to M. 9, one to M. 10, and three to G. 1. The remaining 56 are fragments, mostly, from G. 1, and varying in size from minute pieces to half sheets. All those belonging to G. 1 were received by me in crumbled lumps of waste paper, and required very careful opening-up and flattening-out, as described in the Journal of the Asiatic Society of Bengal, Vol. XVI (1897), p. 226.

Number and Condition.

Regarding their findplace there is some uncertainty. Those belonging to M. 3, M. 9 and M. 10 were procured from a Khotan trader Badruddīn, who could or would give no information respecting their *provenance*. From the same trader the Chinese documents belonging to M. 3 and M. 9 were procured. On the other hand, the Brāhmī documents belonging to G. 1 are said to have been dug up "near some old buried city in the vicinity of Kuchar" (*Introd.*, p. ix); and from the same locality are said to have come the fragmentary Pothis (Nos. 3 and 5 of Set I, and Nos. 4, 5, 6 of Set II) and the two fragments of Chinese documents which belong to G. 1. One of those Pothis (No. 6 of Set II) is written in the same Brāhmī script as the Brāhmī documents; and the whole of these documents and Pothis are written on the same kind of paper. Seeing that some manuscripts, written on the same kind of paper and in the same scripts were dug up by Dr. Stein in Dandan Uiliq, it seems not improbable that the whole of the manuscripts above enumerated really came from that sand-buried old site. That, in any case, the whole of the Brāhmī documents came from the same locality, and even belonged to the same community, seems to be clearly proved by the fact that the same names of persons (see below, p. 33) reappear in different documents.

Findplace.

Most of the complete documents are fully dated (see below, p. 35); but unfortunately the key to the system of dating is, as yet unknown. Hence we are reduced to estimating their age from indirect evidence. On palæographical grounds, as explained *ante*, p. 15, it is probable that the approximate date of the Brāhmī script, as seen in the documents, is the 8th century A.D. This attribution is confirmed by the circumstance that a short remark in the same Brāhmī script is seen in one of the Chinese documents (No. 4), which were found together with the Brāhmī Documents, while on the other hand two other Chinese documents (Nos. 1 and 3), which evidently belong to the same find, are actually dated in the latter half of the 8th century (768 and 786 A.D.) It seems certain, therefore, that the documents were written about that time, and that the species of Brāhmī script which is seen in them, was then

Date.

the prevalent cursive style of writing among a certain class of people in Eastern Turkestan.

Paper and Writing.

The material on which the documents are written is exactly the same kind of thin, coarse, whitish, water-lined paper as that of the Chinese documents. It is also very similar to that of certain Pothis, especially Nos. 5 and 6 of Set II. The water-lines are, longitudinally, 13 or 14 to an inch; transverse water-lines are mostly absent; only on three (Nos. 1, 3, 9) of the complete sheets any distinct traces of them can be seen, $\frac{3}{4}$ to 1″ apart. The size of the mould must have been about 16×12″, the greatest dimensions of sheets, either way, actually measured being 15 and $11\frac{1}{2}$ inches. Professor Wiesner's tests have revealed no trace of loading with starch. The writing always runs parallel to the shorter side and therefore, across the close-spaced water-lines. It is also, as a rule, confined to one side of the paper; only a few fragments (Nos. 28, 29, 48, 50) have a few letters on the reverse. A brush and China ink seems to have been used in writing.

Script.

The script of the documents is a species of cursive Brāhmī. Its affinities and date have been discussed in connection with the Pothis, and are illustrated by Table II, where the letters of the script are shown in column 19. Its approximate date is probably the 8th century A.D. Two varieties of hand can be distinguished in the document, one with rounded, the other with angular forms. A specimen of the latter is shown on plate VII., fig. 2. The former may be seen in Plates II, fig. 6, VI, and VII, fig. 1. In the Journal, Asiatic Society of Bengal, Vol. LXVI (1897), Plates xxi–xxiv, I published a Table of the alphabet of the script. Further investigation has shown that it is not correct in several particulars: the signs for *ta* and *ma* had been wrongly identified as *bha* and *ŋa*, and the existence of some special signs in the form of a hook or a curve had not been recognized: there are also some minor errors; *e.g.* in identifying some forms of the vowels *o* and *i* which nearly resemble each other. Accordingly a revised alphabet is now given in Table III, which also now shows the full system of numeral figures.

Language.

The language of the documents has not yet been identified; but one point seems to be certain, that it is different from the unknown language of the Pothis of Set II; *e.g.*, none of the characteristic conjunct consonants of the latter occur in the Brāhmī documents. Only a few of the words or phrases have, as yet, been determined, but these seem to prove clearly that the language of the documents is an Indo-Iranian dialect, having affinities both with Persian and the Indian Vernaculars, in addition to pecularities

of its own which connect it with the dialects of the Western Highlands of Central Asia. To me it appears that it has its nearest congeners in the so-called Ghalchah dialects of the Pamir, the Sarīq-qolī, Shighnī, Wakhī, Munjānī, Sanglīchī. For an account of these may be consulted Dr. Grierson's "Languages of the North-Western Frontier," in the Linguistic Survey of India, where also references to other authorities will be found.

In the phonetics of the language the most striking point is that it possesses no sonant aspirates (*gh, jh, ḍh, dh, bh*): the guttural *ŋ*, as a non-conjunct,[6] is also absent. With these exceptions, to judge by the alphabetic system, it seems to possess all the ordinary sounds of the Sanskrit phonetic system, including the cerebrals, the three sibilants *ṣ*, *ç* and *s*, the four nasals *ñ*, *ṇ*, *m*, *n*, and the anusvāra. The palatal nasal *ñ* (initial as well as medial) and the cerebral nasal *ṇ* (only medial) do not occur often, and, as a rule, only in names (e.g., *Puñadatto*, *Ñāhaja*) or technical terms (e.g., *kṣāṇa*) which are suggestive of an Indian origin. The exact force of the palatal and cerebral sibilants is uncertain; thus we have *çūṁdasa* 'sixteen' for Sanskrit *ṣoḍaça*, and *ṣauṣa* or *ṣṣauṣa* 'six' corresponding to Shighnī *khhaushkh* and Wakhī *shaḍh* or *shaz*. Moreover the existence of peculiar dialecting sounds seem to be indicated by the occurrence in the script of a special sign, consisting in a subscript curve or hook, which is found with certain words and letters, and even with these not uniformly, and the exact signification of which I have not been able to discover.[7] The quality of the vowels seems to be rather undefined. Thus *o* and *i* are often confounded; *e.g.*, the word *homi*, as spelled in the documents Nos. 2, 9, 10, appears as *himo* in Nos. 1 and 4, and as *himi* in No. 18. No. 12, which throughout uses for both vowels but one sign, a kind of double dot (properly a modification of the ordinary sign of the vowel *o*, see Table II), spells it *hämä*.

With regard to the Vocabulary, I have succeeded in determining a considerable number of words, either names, or terms, or numerals. Some obviously suggest Indian, Persian or Ghalchah affinities, others are peculiar. I may give a few examples. Indian names are: *Puñadatto* (Skr.[8] *Puṇyadatta*), *Suhadatto* (Skr. *Çubhadatta*), *Darmapuño* (Skr. *Dharmapuṇya*), *Pharsapuño* (Skr. *Sparçapuṇya*), *Budasaṁgo* (Skr.

[6] The anusvāra in such words as *saṁga*, may represent a conjunct guttural nasal.

[7] An example of the use of the hook may be seen in the word *ṣi* in Plate I, fig. 6, line 1. The letters with which it is found are *a*, *ā*, *k*, *ḍ*, *p*, *ph*, *b*, *ç*, *ṣ*, *h*. In the transcripts, given in the sequel, they are indicated by an apostrophe placed under them.

[8] Sg. = Sanglīchī; M. = Munjānī; W. = Wakhī; Sr. = Sarīq-qolī; Sh. = Shighnī; Prs. = Persian; Ind. = Indian; Skr. = Sanskrit; Pr. = Prākrit.

Buddhasaŋga), *Jsajsako* (Skr. *Yājaka*, Pr. *Jājaka*), *Çilako* (Skr. *Çīlaka*), *Mañuçrī* (Skr. *Mañjuçrī*), etc. Persian names are *Mahvetari* or *Mahvittaro* (Prs. Mihtar), *Arsalaṁ* (Prs. Arslān?). Peculiar names are *Khattīnai*, *Brīyāsī*, *Vikausa*, etc. Terms signifying divisions of time are *kṣāṇo* 'cycle' (Skr. *kṣaṇa*?); *sali* or *salya*, 'year' (Prs. *sāl*), *māçto* 'month' (Sariqqolī *mast*, Shighnī *mest*); peculiar is *haḍā* 'day.' The name of one of the months is *Skarih-vāri* (Prs. *Shahriwār*, see below). Other miscellaneous words, of a more or less certain meaning, are *u* 'and' (Wakhī *u* or *o*), *khu* 'self' (Sr. and Sg. *khu*), *homi* or *homo* auxiliary verb (Wakhī *hümü*), *haṁguṣṭo* 'witness,' *viçto* 'become' (Wakhī *wāst*); *spā-ta* 'our' (Wakhī *spā*?). The numerals are as follows:—

1 (not observed).
2 *do* (Sg. *du*, M. *do*).
3 *trai* (Sg. *trai*, W. *trui*).
4 *saspari* (Sg. *safor*, Sr. *tsavur*).
5 *paṁji* (Sg., W. *panz*, Sr., Sh. *pinj*).
6 *ṣṣauṣa* or *ṣauṣa* (Sh. *khhaushkh*, W. *shaz*).
7 (not observed).
8 *haṣṭa* (Prs. *hast*, Sh. *washkht*).
9 *no* or *nau* (W., M. *nau*).
10 *dasa* (Sg., Ind. *das*).
12 *dodasau* or *dvadaso* (Skr. *dvādaça*).
16 *çūṁdasa* or *çūṁdaso* (Skr. *ṣoḍaça*).
20 *bista* (W., Sr. *bist*, *wīst*).
30 *ṣiyyāṁ* (W., Sr. *sī*).
80 *saspari-bisto* (W., Sr. *tsavur-vist*).
100 *se* or *sai* or *saya* (Ind. *sai*, *sau*).
500 *paṁ-se*.
1000 *hsāro* or *hajsāro* (W., Prs. *hazār*).
2000 *dvi-hsāri*.
3000 *trai-hsāri*, etc.

Numerals are written in two ways: either in words or in figures. When written in words, these are frequently abbreviated; thus, *paṁ* for *paṁji*, and *hsā* for *hsāro*. The figure notation is the ancient Indian, which possesses no cypher, but twenty figures; *viz.*, 9 for the units, 9 for the tens, one for hundred, and one for thousand (see Table III). The multiples of hundred and thousand are expressed by ligatures of the figures of those two numbers with the unit figures. Thus 13 is expressed by the juxtaposition of the figure for 10 and the figure for 3 (10+3); 3750 is represented by the three figures for 3000, 700, 50; similarly 8800 by the two figures for 8000 and 800 (see Table III). Addition is made by post-positing, and multiplication by pre-positing a unit figure or unit word. Thus 22 is *bisto-do* (i.e., 20+2); 80 is *saspari-bisto* (i.e., 4×20); 300 is *trai-se* (i.e., 3×100).

With regard to other grammatical forms I have noticed the following inflexions: *āro* indicates the plural; e.g., *Dharmapuño haṁguṣṭo viçto* 'Darmapuño has become witness;' but *Brīyāsī u Budaçāṁ haṁguṣṭi viçtāro* 'Brīyāsī and Budaçāṁ have become witnesses.' *Mye* or *cu* and

i or *e* or *ai* indicate the locative (or oblique) case; e.g., *bista-mye salye* 'in the 20th year'; *dasa-mye haḍai* 'on the 10th day'; *ṣṣauṣa-cu salya* 'in the 6th year'; *Kaji* 'in the (month) *Kaja*.'

An interesting fact is that ten of the complete documents are fully dated: also several of the fragments show mutilated dates. I have succeeded in reading the dates, but the key to interpreting them is still to be discovered. In its fullest form the date is seen in the following opening passage of the document No. 8 (Plate VII, fig. 2).

17-mye kṣāṇi ṣṣauṣa-cu salya Ñāha māçto 17-mye haḍai,

i.e., 'in the 17th cycle, the sixth year, the month Ñāha, the 17th day.'

But *kṣāṇi* is usually omitted, as in the opening passage of the document No. 13 (Plate II, fig. 6).

bista-mye salye Kaji māçto dasa-mye haḍai,

i.e., 'in the twentieth year, the month Kaji, the tenth day.'

The month's name and the numbers are frequently post-posited, as in the opening clause of the document No. 12.

sali 20 māçto Chvātaja haḍā 23-mye,

i.e., 'in the year 20, the month Chvātaja, the day 23.'

It will be noticed that the forms *salya* or *salye* and *haḍai* are only used when they follow the numeral qualified by *mye*; otherwise *sali* and *haḍā* are used. This seems to point to the former being inflected forms. From its position in the series, the term *haḍā* (or *haḍai*) can only mean 'day.' For the same reason *kṣāṇi* should signify a larger period than a year. Hence, I have provisionally translated it by 'cycle.' But there are difficulties. Two *kṣāṇas* are named in the documents: the 17th and the 19th; and once the term *kṣāṇi* occurs without any number qualifying it. In the latter case, as well as in that of the 19th *kṣāṇa*, the 20th year is mentioned; and the highest number of years mentioned in any document is 22. It follows that none of the well-known cycles will fit in: the 12 years' cycle is too short, and the 100 years' and 60 years' cycles are too long. A double 12 years' cycle might suit: from the 6th year of the 17th to the 20th year of the 19th cycle we should have (18+24+20=) 62 years. So, after all, *kṣāṇi* may signify something different: possibly it may refer to the number of the register, or of a local division.

The months are always quoted by their names. I have observed nine of these: (1) *Skarh-vāri* or *Skarih-vāri*, (2) *Cvātaja*; (3) *Būñaja* (or *Mūñaja*), (4) *Khahsāja* or *Khahsā*, (5) *Haṁtyaji*, (6) *Ñāhaja* or *Ñāha*, (7) *Jeri*, (8) *Kaja*, (9) *Pāñiji*. Two others are mutilated: * * *khāji*, and * *i* * *īja*. Of these names *Skarih-vāri* or *Skarh-vāri* is evidently identical with the old Persian *kṣathra-vairya* and the modern Persian *Shahrīvar*, the sixth month of the year. No other name seems to yield to a similar identification; on the contrary *Cvātaja* (or *Cvāta*)

and *Jeri* rather suggest some connection with Sanskrit *Caitra* (March–April) and *Jyeṣṭha* (Hindi *Jeṭh*, May–June).

Purport.

Most of the dated documents have attached to them one or several (in one case, No. 9, not less than twelve) names, accompanied by two or three small vertical strokes. (See Plates VI and VII.) From this it seems probable that they are records, similar to the Persian deeds of sale of land (Nos. 1 and 2 of Set II,), and the Chinese deed of loan (No. 3 of Set I), attested by the names and marks of witnesses. Three other complete documents (Nos. 5, 6, 10; see also No. 65) have no names and marks of witnesses, but stamps or signatures, not yet deciphered, but apparently in Chinese; shown in the marginal Woodcut No. 3. These, accordingly, like some of the other Chinese documents (Nos. 1, 4, 8), may be requisition orders or certificates of payment of taxes, bearing Chinese office stamps or signatures. As to the remaining complete documents and the fragments, it may be presumed that their purport is similar.

No. 3.



(No. 1. Document. (Plate VI.)

Belongs to M. 9. Size, $13\frac{1}{4} \times 11\frac{1}{8}$", or nearly a full sheet. Record complete, in 12 lines, running parallel to shorter side, about one inch apart from one another, with about 28 or 30 letters in the line, in a round hand. Bottom of sheet, from 2 to 3 inches, blank. Dated, at the beginning, "on the 5th day of the month Skarh-vāro, in the 17th year." Apparently consists of two parts: the first, comprising 9 lines, signed by two persons Brīyāsī and Budaçāṁ; then follows postscript, of 3 lines, signed by one Puñagāṁ.

The following is a transcript of the document:

(1) *Oṁ salī 17 māçto Skarhvāro haḍā 5 hvaṁ-no-ñu-do-vi-ça-va-haṁ tto-ña beḍa ṣi pīḍako*

(2) *mye pracaina cuā sīḍako na ḍau nā-sti kṣī-rū ki-ro vī haṁ-tsa rū ci çaṁ-kye jsa ci buro tvā sa-*

(3) *lī pyaṁ tsā ṣta kṣī-rū hi ra pajīde sīḍako heḍo pha rā ko ba ko caṁ-do pajide u ci va vā*

(4) *ra maṁ-gā-ra caṁ-ga īde ttyāṁ Brīyāsi u Budaçāṁ chīyāya tti do*
sīḍako va-gvā-ro-no-çto

(5) *u vaña Brīyāsi ceṁ-gāṁ js(ā)ro hamayo hauḍo khu vā nau ha*
salye bi sai jsāro ttū sīḍako he-

(6) *ḍo u Brīyāsi bīḍo hamayo do u cvai va ḍā-ṣṭa pa mū hi tsī ttū tī*
sīḍako yīdo ru bi

(7) *(sa)lū no nara dohimi-mye haḍā vī tarāṁ mi ci vā traṁ do ttīra*
ṣi pīḍako praṁ-māṁ hi-

(8) *(mo khu)-hā Brīyāsi bu Budaçāṁ haṁguṣṭi viçtāro*
Brīyāsi | haṁ | gu | ṣto

(9) *tto buro vara byāṁ naya* *Budaçāṁ | haṁ | gu | ṣto*

(10) *Puñagāṁ ‖ ci vaña ru staṁ Brīyāsi jaṁ pha himā de Budaçāṁ nī*
hā chīyāyī do sī-

(11) *Khauçyaṁ ‖ ḍako va-çvā-ro-no-çto* *Puñagāṁ | haṁ | gu | ṣto*

(12) *Hatkaṁ*

No. 2. Document.

Belongs to M. 9. Size, $11\frac{1}{2} \times 8\frac{3}{4}''$, rather more than one-half of a full sheet. Record complete, in 8 lines, parallel to longer side, with 17 letters in the line, in a large, round hand. Dated, at the beginning, "on the 8th day of the month Cvātaja, in the 11th year." Signed by one person, Puñañjāṁ.

No. 3. Document.

Belongs to M. 9. Size, $11\frac{1}{2} \times 6\frac{3}{4}''$, rather less than one-half a full sheet; upper left-hand corner torn away. Beginning of first three lines slightly mutilated, otherwise record complete, in 7 lines, parallel to longer side, with 27 or 28 letters in the line, in round hand. Dated, at the beginning, "on the 22nd day of the month Kaja, in the 3rd (?) year." Signed by one person, Darmapuño.

No. 4. Document.

Belongs to M. 9. Size $11\frac{1}{4} \times 6\frac{1}{2}''$, rather less than one-half a full sheet. Small piece, with two letters, in lower right-hand corner torn off; otherwise record complete, in 7 lines, parallel to longer side, with 24 letters in the line, in round hand. No date. Signed by one Añjāṁ.

No. 5. Document. (Plate VII, fig. 1.)

Belongs to M. 9. Size, $10\frac{7}{8} \times 6\frac{3}{4}''$, clean cut along the edges. Record complete, in 6 lines parallel to longer side, with 23–30 letters in a line, in round hand. Dated, apparently at the end, "on the 10th day of the month Jeri." In place of usual signature, a large illegible Chinese stamp.

The following is a transcript of the document:

(1) *Oṁ ṣṣau phvai hvu hi tta parī* *gahseta spātā*
sīḍako vara u ttyāṁ hvaṁ-

(2) *ḍāṁ vara cu ṗeṁmīnā thauna puḍaṁ da u thauna ni hauḍāṁ da vañau va mara hā rū sāṁ ma de u*

(3) *ha tto kaṁ mūri ji stā do-dasau hsārya trai se ttyāṁ mūryau jsa kāṁ ha thaunako gvaṣcāṁ do*

(4) *trai se paṁ-saya ṗeṁmīnai yūṁ jsā thau gvaṣceṁ di-rso chā khu parau pvī rau tti mū-*

(5) *ri haḍā haṁ-gi pu ṣa hauḍa haṁ-tsa hsaṁ thi na khu çau jva na ni dā-çī dohi-mye*

(6) *ttāṁ Jeri 10-mye haḍai ttā parau tsve* (Stamp)

No. 6. Document.

Belongs to M. 9. Size $11 \times 6\frac{1}{2}''$, but a narrow strip, about $\frac{1}{2}$–$1''$ wide, torn off along the left edge, mutilating one or two initial letters of each line. Otherwise record complete, in 7 lines, parallel to longer side, with 24–26 letters in the line, in round hand. Dated, apparently at the end, "on the 6th day of the month Haṁtyaji." In the body, also, a mention of the month Kaji. In place of usual signature, an illegible Chinese stamp.

No. 7. Document.

Belongs to M. 9. Size $11 \times 8''$. Apparently an unfinished document consisting of one line and a half of writing in round hand. Neither signature, nor stamp; and dated, at the beginning, only "in the month Skarih-vāri. A large piece is torn out of the lower blank portion of the sheet.

No. 8. Document. (Plate VII, fig. 2).

Belongs to M. 9. Size $11 \times 6''$; clean cut along the edges; rather more than one-third of a sheet. Record complete, in 6 lines, parallel to longer side, with 9–22 letters in the line, in an angular hand. Dated, at the beginning, "on the 17th day of the month Ñāha, in the 6th year, in the 17th *kṣāṇa*." At the end, no signature, but two scrawls which perhaps may represent some equivalent mark (see No. 12).

The following is a transcript of the document:

(1) *Oṁ 17-mye kṣāṇä ṣauṣa-cū salya Ñāha māçtä 17-mye haḍai gah-sāta*

(2) *ja auya Cvātajo māçtū thaṁgä samau tāṁ dä hauḍā ka ḥvaṁḍä ho-*

(3) *mya 55 thaṁgä ye paṁ-hsāro paṁ-se mūrä × e × × y mūrä hsāri*

(4) *sa to-ña haṁ-ḳhī ça-hsā-ḍa hvaṁ-ḍä 7 mara mū ñaṁ × × × pa jsa*

(5) *hau para do-rsä na × au hvaṁ-ḍä dasau haṁ ba × × × ü × ā-mya*

(6) *55* ॥ ꣽꣽꣽ

No. 9. Document.

Belongs to M. 10. Size $11 \times 14\frac{3}{4}''$, being a full sheet, but a narrow strip, about $\frac{1}{2}''$ wide, torn off along the left edge, with 1–3 initial letters of a few lines. Record practically complete, in 22 lines, parallel to shorter side, with 21–23 letters in the line. Dated, at the beginning, "on the 23rd day of the month Skarih-vāri, in the 22nd year." Signed by 12 witnesses, arranged in two columns, thus:

Brīyyāsī.	Vikausa.
Puñagāṁ.	Mūpadatto.
Maiyadato.	Jaṣāṁna.
Añjai.	Arsoli.
	Çalā.
	Jsajsaki.
	Pheṁkruki.
	Mahvetari.

No. 10. Document.

Belongs to G. 1. Size, $11 \times 9\frac{1}{4}$; a small blank piece, about $1\frac{1}{2} \times 1\frac{1}{4}''$, torn out of left-hand edge. Record complete, in 11 lines, parallel to longer side, with 16–19 letters in a line, in a large round hand, consisting of two parts: the first part, of 8 lines, dated at the beginning, "on the 20th day of the month Ñāhaja, in the 20th year," and signed by a witness Açonekūle. The second part, of 3 lines, is also apparently dated at the beginning, "in *kṣāṇi* (without any number), in the 20th year, on the 26th day of the month Ñāhaji," and has only a small illegible (Chinese?) signature or mark.

No. 11. Document.

Belongs to G. 1. Size $11\frac{1}{4} \times 7\frac{7}{8}$. Two narrow tongues torn out of the top and bottom of the sheet, causing the loss of a few letters; otherwise record complete, in 8 lines, parallel to shorter side, with 27 to 29 letters in a line, in round hand. Ink very much faded, and writing very difficult to read. Dated, at the beginning, "on the 23rd day of the month Khahsāja, in the 19th kṣāṇi;" no year. Also no signature of witness, nor stamp. In the body of the record occur several names, such as Jsajsako, Gaudako, Upadatto, Jigeṁḍai, Jahsäbudo, Īrasaṁgo, etc.

No. 12. Document.

Belongs to G. 1. Published by me in the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897), Plate V. Size $11\frac{1}{2} \times 9''$; but a portion of the blank bottom of the sheet torn off. Record complete, in 8 lines, parallel to shorter side, with 26 or 28 letters to the line, in a large semi-angular hand. Dated, at the beginning, "on the 23rd day of the month Cvātaja, in the 20th year." Signed by one Maṁdrusä.

At the end, two scrawls, similar to those in No. 8. A revised reading is herewith added:—

(1) *Oṁ salī 20 māçtä Cvātaja haḍā 20 3-mye hvaṁ-nä-ñāṁ-dä-vä-ça-vā-haṁ dä kye ṣṣau Väkya-*

(2) *dattä gä-rya vā-ḍä pīḍakä-mye pracaina cä bugura Maṁdrusä na çaṁ-dā gä-rye a vī mya*

(3) *gaṁ rsa kū ḍai vī-ra trai kū çe rcū-rä vā-çä-ra pī ha ve mūrä hsārä ttä bu-rä-mye çaṁ kye hajsā-*

(4) *raṁ ñä u cä jsai puña-vä-rçä hī ya × × ñū vä jsa Sanekulä hīvī ka ḍa kä ttä-ña*

(5) *sa gaṁ ha-khuī bugura çā-ka-ra-kä-stä ī-dä khuai ttī Maṁdrusä rcū-rä vā-çä-ra burä*

(6) *i-hsgä nā-te i-hsge-de maṁ-gā-ḍa ra nä i-hsgä-rya hämä tī-ra ṣä pī(ḍakä) praṁ-*

(7) *māṁ khu-hā Maṁdrusä haṁguṣṭä väçtä ttä burä va-ra byāṁ na-ya bye Arsalaṁ bye ×*

(8) *ña ×ai bu × na ḍä bye × ḍä ⁓⁓ Maṁdru | sä | haṁ(guṣṭä | väçtä).*

The letters connected with a hyphen form groups which occur also in other documents.

No. 13. Document. (Plate II, fig. 6).

Belongs to M. 3. Size $15 \times 9\frac{1}{2}''$, but a strip, perhaps $1\text{–}1\frac{1}{2}''$ wide, torn off along the left edge, probably originally a full sheet. Record complete, in 12 lines, parallel to shorter side, with 24–26 letters in the line, in round hand. Dated, at the beginning, "on the tenth day of the month Kaji, in the twentieth year." Signed by 7 persons, arranged in one column: Alttaṁ, Phekruko, Hatkaṁ, Mayadatto, Budaçāṁ, Ñuhadatto, Jsajsako. In Plate II, fig. 6, the two initial lines are shown. They read as follows:

(1) [*Oṁ*] *bistamye salye Kaji māçto dasamye haḍai ṣi pārava*

(2) [*pīḍako-mye*] *pracaina cu ā na hvā cai sai tto mūre hā yitti bu-ru*

No. 14. Document.

Belongs to G. 1. Incomplete, lower half of sheet torn off; size of existing upper half, $11 \times 5\frac{1}{2}''$, damaged. Only two complete, and three mutilated lines. Dated, at the beginning, "on the 10th day of the month **i***īja*, in the 5th year." Signatures, if any, lost.

No. 15. Document.

Belongs to G. 1. Incomplete; right half and portion of blank bottom torn away; existing size $13\frac{1}{4} \times 6\frac{1}{4}''$. Record consists of 11 lines, parallel to shorter side, with about 13 or 14 letters surviving in a line. It is divided into four parts of 3, 4, 2, 2 lines respectively; three of them

dated, the first "in the 6th year," the third "on the 29th day of the month Būñaja or Mūñaja, the fourth "in the month Cvātaja." The signatures, if there were any, are lost with the excised right half; but the following names occur in the text of the four entries: in No. 1, Khattīnai, in No. 2, Puñagāṁ and Pheṁkruko, in Nos. 3 and 4, Khattīnai and Pheṁkruko.

No. 16. Document.

Belongs to G. 1. Published by me in the Journal of the Asiatic Society of Bengal, Vol. LXVI (1897), Plate vi, No. 9. Mutilated on three sides, right, left, and bottom; existing size $8\frac{1}{4} \times 6''$. Record in 6 lines, parallel to shorter side. Date and signatures, if any, lost; but the month Ñāhaja, and the personal name Mañuçrī occur in the text.

No. 17. Document.

Belongs to G. 1. Published by me *ibidem*, Plate viii, No. 11. Mutilated on two sides, left and top, being the larger portion of the lower half of the document; existing size $8 \times 5\frac{1}{2}''$. Record, in 9 lines, parallel to longer side, all more or less mutilated. It is divided into several parts, of three of which fragments survive. The second part comprises the (existing) lines 2–5; it begins with the mutilated date "on the 13th day of the month," and ends with the name and mark of one Ñuhadato. The third part comprises lines 6–8; the date, if any, is lost; but it is signed by one Raṁmaki. Of the first part only the concluding line (*i.e.*, the existing first line) remains, showing the two names Çalāṁ and Pheṁkruko.

No. 18. Document.

Belongs to G. 1. Mutilated apparently on three sides, top, left, and bottom; existing size, $7\frac{1}{2} \times 4\frac{3}{4}''$. Record in five more or less mutilated lines, comprising two entries, of 2 and 3 lines respectively. Date of either, if any, lost; but the first signed by Mahvittaro, the second by Marçoko.

Nos. 19–69. Documents.

All belong to G. 1, except Nos. 30, 55, 58, 59, 65, 68, which belong to M. 3. All are small fragments of various sizes, not deserving any detailed description. Specimens may be seen in the Journal Asiatic Society Bengal, Vol. LXVI (1897), Plates iv, Nos. 6, 7, vi, No. 10, vii, Nos. 12–15. The following points, however, may be noted. Nos. 28, 29, 48, 50 are peculiar in showing a few words inscribed on their back; thus No. 48 has on the back the names of the two persons Puñagāṁ and Pheṁkruki; and No. 50 has a mutilated date "on the 5th day of the month Pāñiji," the year being lost. No. 65 shows a small-sized elaborate (Chinese?) mark or signature, similar to that on No. 10. On No. 23 occurs the date "on the 22nd day of the month Cvātaji"; and on No. 29 the mutilated name of the month $\times\times$*khaji*.

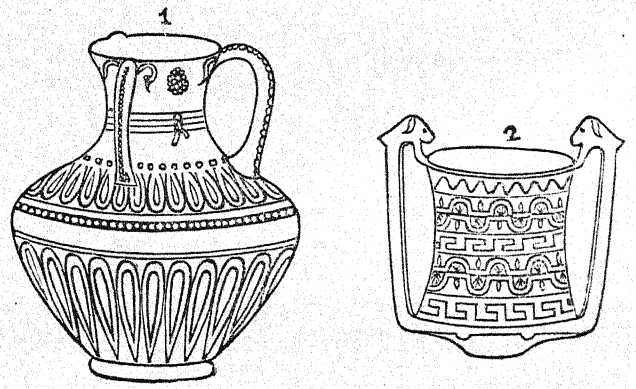
Section IV.—POTTERY, TERRACOTTAS, MISCELLANEOUS OBJECTS.

In the description of the objects dealt with in this Section, I must limit myself to a simple classification and explanation of the illustrative Plates VIII–XIII. There is one point, however, which has struck me, and which I should like to point out: the very curious analogies to objects of Greek art of an early date. They will be referred to in connection with each Plate. I only state the facts, as noticed by me. What conclusions they may justify, I must leave to experts to determine.

Plate VIII.

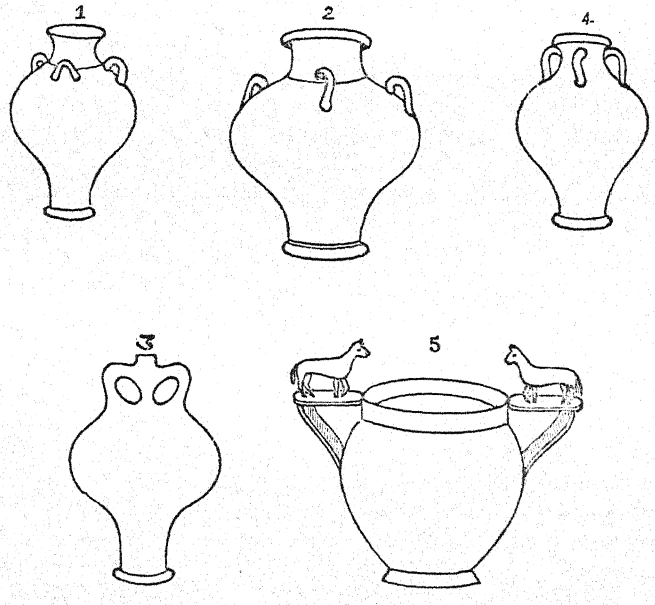
In this Plate fragments of a kind of decorated jar are shown. Its probable appearance, when complete, is shown in the Frontispiece of Part I, which is reconstructed from the fragments Nos. 1, 2, 7, 8, 14. At the time when this was prepared, in 1899, the only uncertain point was whether or not the jar was furnished with a foot. From various indications I came to the conclusion that it probably had no foot, but resembled in shape the well-known round-bottomed Indian *ghaṛā* (Sanskrit *ghaṭa*), of which a plain miniature specimen is shown in No. 5. In the meantime figures of two much better preserved specimens have been published by Dr. Sven Hedin in his *Durch Asien's Wüsten*, vol. II, p. 43. These show that the jar in question was more probably furnished with a foot, and possessed the shape shown in Woodcut No. IV, 1. With this exception, the re-construction, is substantially correct. A revised

No. IV.



re-construction, however, with the foot, is now published with Part II. The jar was furnished with three handles. This is proved by No. 7 which shows the fractured bases of the three handles, equidistant from one another. The fact is also clearly indicated in Dr. Sven Hedin's figures. In the case of the smaller jar, the neck and handles are missing, but the three heads, on the shoulder of the jar, from which the three handles sprang, are still there. His larger jar possesses the neck and one of the handles, but from the arrangement of the decorations of the neck, it is probable that originally it possessed three handles. The possession of three handles seems to me to be a point specially worth noting. Three-handled jars or vases are not at all uncommon in very early Greek art. I have seen numerous specimens (*e.g.*, in the British Museum, the Ashmolean Museum in Oxford, and the Akademische Kunst Museum in Bonn) from the Mycenian age and area, also from Cyprus. Some may be seen figured in the *Mykenische Tongefässe* of Furtwängler and Löschke, Plates III, 10, VII, 42; also in their *Mykenische Vasen*, Plates I, 1.3, III, 19.20 IV, 26, etc. On the other hand, they are entirely absent from the Classical Greek age and area,[1] and only reappear at a comparatively late date. The only three-handled vessels that I remember having seen are certain Roman vases of the 2nd century A.D., in the Provincial Museum in Bonn.

N. V.



[1] I am referring here to true three-handled vessels, all the handles of which are alike in form and position. False three-handled vessels do occur in classical Greek

The handles are made, in the form of animals or griffins (see Nos. 10, 11, 14), standing up and bending over the rim of the vessel, as seen in No. 8. In the three-handled Mycenian vases, above referred to, the handles, ordinarily are short curves attached to the shoulder of the vessel; see Woodcut No. V, 1.2. But examples of three handles rising from the shoulder to the top of the neck (as in the Khotan jars) do occasionally occur; one is shown in the *Mykenische Vasen*, Plate VIII, No. 44. (Woodcut No. V, 3). In the Roman vases a somewhat similar form of handle is usual; see Woodcut No. V, 4. In these cases the handles are plain; but plain handles have been found also in Khotan, as in the larger of the two jars of Dr. Sven Hedin (Woodcut No. IV, 1), where the body is richly decorated in the usual way, while the handle is comparatively plain. Handles imitating animal forms, the Khotanese fashion, are extremely rare in Greek art. The only example I remember having noticed is an Etrurian cantharus, figured in Ridgeway's *Early Age of Greece*, vol. I, p. 67 (Woodcut No. IV, 2). It has only two handles, but they terminate in ram's heads which similarly bend over the rim of the vessel.[2] The case of the two-handled cup, ornamented with horses, which is shown in Professor Furtwängler's *Bronzen von Olympia*, p. 96, Plate XXXV, No. 671 (Woodcut No. V, 5), is different. Here the horses, which look over the rim, are not a constituent element of the handles, but are full figures placed on the top of the handles, as mere accessory ornaments. This kind of treatment of animal forms, however. does not seem to be unknown to Khotanese art. The bird, shown in No. 12 and in Plate XIX of Part I, No. 50, probably served to adorn the top of a plain handle; or possibly it may have formed the handle of a lid. It may be compared with the ornamental use of the dove in Greek art, see the illustrations on pp. 100, 101, 102 of Tsountas and Manatt's *Mycenian Age*.

Among the miniatures, in Plate XIX of Part I, the same bird is represented, in No. 49, nestled in a flower; and in No. 70 a twin of them is represented, provided with monkey's heads and arms, playing on a lute.

art. In these one of the handles is vertical, while the others are horizontal, as in the Hydrias called in Italian *vasi a tre maniche*. (See S. Birch's *History of Ancient Pottery*, new ed., p. 364).

[2] In *Bronzen von Olympia*, pp. 119, 120, Plate XLV, griffins from the Praenestian find are shown, but, as Professor Furtwängler explains, these looked outwards, and did not form proper handles, but were merely decorative (as shown *ibidem*, Pl. XLIX). Similar is the case of certain early Cretan vases which are decorated with three (equidistant) plastic female heads, looking outwards and being only false handles. See Professor Furtwängler's *Beschreibung der Vasen Sammlung*, p. 109, No. 983.

The decorations are of two kinds, either moulded or incised. The moulded ones were invariably made in separate pieces and stuck on to the jar before it was fired (*appliqué* work). They separate easily enough from the fragments of pottery, especially when saturated with salines, and are found by themselves in large quantities. All the heads, shown in Plate X, Nos. 1–18, are ornaments of this kind; so also is the pillar in Plate VIII, No. 3. Pillars *in situ*, with Corinthian arches and Buddhist railings are shown in No. 1. These show distinctly the type of Graeco-Buddhist art, prevalent, in the earliest centuries of our era, in the North-western frontier provinces of India. To the same type belong the full and half figures, which form a very common decoration on the jars; see Nos. 2, 4, 7, also Plate IX, Nos. 1–6, 20–23. On the other hand, the moulded ornaments on the fragment No. 22 of Plate IX seems to me to show rather an Indo-Parthian type, suggested by the half-figure wearing the *torquis*. Some moulded ornaments represent conventional types of foliage or flower, beautifully executed; see, *e.g.*, No. 1, where it seems to form the moustache of the mask, and No. 13; also Plate IX, Nos. 8, 9, 10, 15, 16. Very similar to No. 10 of Plate IX is an ornament shown in Furtwängler's *Mykenische Vasen*, Hülfstafel B, No. 4.

The incised decoration consists of various systems of lines, dots and ringlets. In No. 1 these elements are arranged in the form of garlands; in Nos. 2, 4, 7 we have series of lines arranged horizontally and vertically; also series of ringlets arranged in a circle. A great variety of other arrangements may be seen, *e.g.*, in Plate IX, Nos. 8, 11, 13–17.

With respect to size, the decorated jar varied greatly. The example, of the body of which a portion is shown in No. 1 must have measured about 13 × 11 inches, while the jar, of which No. 7 shows the neck and upper part of the body, must have been very small and can have measured only about 4 × 3 inches.[8] On the other hand, the jar to the neck of which the fragment, shown in Plate IX, No. 23, belonged, must have been, to judge from the slightness of curvature of the piece, of very large dimensions. Vessels of the latter size, to judge from the absence of wheel marks on the fragments, appear to have been made entirely by hand. The fragments of the small and medium-sized jars, however, show distinct traces of having been turned on the wheel.

In addition to these decorated jars, there existed a great variety of jugs and vases, single-handled and double-handled, of which some show very artistic designs. A comparatively plain single-handled jug

[8] So also Dr. Sven Hedin's two jars, which measure only about 4 × 3 and 3 × 2 inches.

is shown in No. 9, in full size. Another miniature plain jug of exquisite shape and make is shown in No. 40 of Plate XIX of Part I, and some more, of a more ornamental design, are in the same Plate, Nos. 21, 39, 44. The same Plate has also some fine double-handled vases in Nos. 41, 42, 43, 45. All these are examples of miniatures. The collection, apparently, contains no fragments of any similar vessel large enough for actual use, except perhaps the handle, shown in Plate IX, No. 19, which may have belonged to a real serviceable cup. But the absence of fragments is no proof that they may not have existed.

All the vessels—jar, jugs, vases, cups—are made of burnt clay, extremely hard, with no "glaze," but only a "gloss." Their colour varies from a bright red to a very light red, apparently in proportion to the length of exposure. Some pieces (*e.g.*, Plates X, Nos. 20, 30, 37, 43; XI, Nos. 20, 21; XIII, No. 27, Miniatures Nos. 47, 50) are quite whitish, and apparently made of a different kind of clay; for they are baked quite as hard as the red pieces. In one case, No. 7 in Plate IX, the fragment is almost black, due apparently to over-exposure; and in this case, there seems also to be real glazing. One fragment, No. 1 in Plate X, which shows a grey colour, belonged to a vessel which apparently was made of a different material. None of the fragments, included in the Collection, shows any trace of painting or colouring.[4]

Plate IX.

This Plate comprises a series of fragments, to illustrate the great variety of moulded and incised ornament. No. 1 shows the half figure of a *Gandharva*, bejewelled, holding a garland, and set in a lotus. This is a very common representation, as may be seen by referring to No. 23, also Nos. 2 and 4 of Plate VIII, and No. 2 of Plate XII.[5] No. 2 shows a curiously dressed figure, suggesting our courtfool's bell-attire. No. 3 shows a rustic *en face* dressed in the Indian loin-cloth (*laṅgoṭī*), and carrying on his head a jar, or some other load, which he steadies with his right hand.[6] No. 4 shows a turbaned and robed figure, playing on a flute (σῦριγξ μονοκάλαμος) or oboe (αὐλὸς). No. 5 shows a similar figure, playing on a Pan's pipe (σῦριγξ πολυκάλαμος) made of seven

[4] See M. F. Grenard's observations on Dutreuil de Rhin's collection in *Mission Scientific dans la Haute Asie* 1890-1895, Part III, p. 108.

[5] Among Dr. Sven Hedin's fragments there is a Gandharva who is represented in a posture exactly similar to that of the monkeys shown in Plate X, Nos. 34 and 35. With his right hand he holds a cup to his mouth, while his left is *veretrum tenens*. See below footnote 13.

[6] One of Dr. Sven Hedin's fragments shows a procession of similar rustics, walking to left, through an arched colonnade.

reeds. No. 6 shows another figure, playing with a pair of cymbals, or possibly a woman braiding her hair. Nos. 7–18 show a great variety of line ornaments, accompanying, almost invariably, various forms of faces or masks. Among them, there are rosettes (No. 11), garlands (Nos. 14, 15), nets or circles of lines or dots (Nos. 16–18), wavy lines (No. 11), rows of semicircles or arches (No. 11), etc. No. 19 shows what probably was the handle of a cup.[7] Nos. 20–23 show fragments of the rim of three large vessels. The rim of one (No. 20) was adorned with a series of full figures: two men, in *laygoṭī*, wrestling; a monkey squatting on its haunches and holding a large vessel or melon;[8] an elephant with upturned trunk, carrying two men who squat on its back, facing one another; a dead bird hung neck upwards (?). Nos. 21 and 22 show the same fragment, inside and outside respectively. The former is adorned with three rosettes, above a perforated ledge: the latter, with a Buddhist railing, enclosing a decorated (conventional) *chaitya*, and the half figure of a man wearing a *torquis*. The rim, shown in No. 23, was adorned with a series of ornamental arches, within them the usual *Gandharvas* with garlands, in the triangular interstices small rosettes, and above the whole a double circle of alternate beads and lines.

Plate X.

Nos. 1–19 of this Plate illustrate the great variety of heads, or rather masks, used as ornaments. They all show traces of having originally been attached to the sides of jars. They were moulded separately and stuck on to the jar before it was baked; and they come off with comparative ease, especially from pieces saturated with salines. Apparently they were used, as a rule, by themselves; but occasionally, as shown by a fragment in Dr. Sven Hedin's collection, the head belonged to a whole *appliqué* figure. Nos. 1 and 2 show pieces of the jar still adhering to them. No. 7 shows the identical mask of which another specimen is still adhering to the fragment of a jar in Plate IX, No. 17. Some of the masks represent the faces of men, some with a moustache (No. 2), others clean-shaven (No. 5), others with round beard (No. 6). Nos. 7–9 show women's faces; some with earrings (Nos. 7, 8), others with a sort of frill round them (No. 9). Some of the faces (Nos. 10–17) are made to look canine or feline, with protruding tongue (No. 14), or roaring with open mouth (No. 15), or showing the teeth (No. 16).

[7] I have observed Mykenian cups with similar handles in the British and Ashmolean Museums.

[8] In his *Beschreibung der Vasensammlung im Aquarium* Professor Furtwängler notices an early Greek vase from Nola, decorated with a sitting monkey who holds, in front of him on his knees, a bulging krater.

No. 18 suggests a vampire; still more so the mask seen in Plate VIII, No. 13. No. 19 presents the distinct face of a monkey; but it is more probably the front piece of the head of a real figure of a monkey, similar to the complete head shown in No. 21. There is a very striking resemblance between the female masks (such as Nos. 7 and 14) and the Gorgon's head (with or without protruding tongue), as seen on early Greek coins of the 6th to 4th centuries B.C., figured in the British Museum Catalogue of Coins of Macedonia, pp. 83 ff., and Eretria, pp. 119 ff., plate xxii, Nos. 1–4, 6–10.[9]

Nos. 20–43 are full figures, made in the round. As a rule, these figures are made in two portions, the front and back halves being cast separately in distinct moulds, and afterwards joined together before baking. The joint may be seen in No. 33, in the fracture of the arm. Very often the halves come off at the joint, and are found separately. In figures, like those of the camels (Nos. 20, 26–28) and others (Nos. 29–31), of course, it is the two sides that are moulded separately.

The most commonly occurring figures apparently are those of monkeys. They are represented in a great variety of postures and acts, shown in Nos. 22–25 and 32–43. Such as embracing and kissing (No. 37, also Plate XIX of Part I, Nos. 66, 67; compare also Plate XI, No. 22), sitting or swinging on a bough and eating (Plate XIX, No. 51; in our Plate, No. 43, where the bough has broken away; so probably also in Plate XIX, Nos. 52, 53; the object, lying across the lap, apparently a pad, to be seen also in Plate XIX, Nos. 54, 61, is not clear); sitting, kneeling, or squatting, and playing on some musical instrument (Nos. 24, 25, 34, 35, also Plate XIX, Nos. 34, 54, 55, 58, 60, 61); sitting meditatively (No. 41; also Plate XIX, Nos. 32, 56, 65, 68, 74); sitting and holding a stick or other object (No. 36; also Plate XIX, 64);[10] wearing a short tunic or a "comforter" (Nos. 22, 39). In No. 40 the monkey is represented with a goat's head; perhaps also in Nos. 23 and 38. On the other hand, in Plate XIX, No. 70, twin monkeys, playing on a lute, are represented with the body of birds. Often, especially when playing musical instruments, they are represented ithiphallic (Nos. 23–25, 34, 35,

[9] Compare also the similar mask of a youth with bull horns and ears, in Professor Furtwängler's *Bronzen von Olympia*, Plate LXVIII, No. 1274.

[10] Compare No. 1313 in Professor Furtwängler's *Beschreibung der Vasensammlung im Aquarium*, which describes an archaic vessel, made in the form of "a tailless ape, sitting on a stool, entirely covered with dots (to indicate hair), right hand on the knee, left hand raised to face, as if wiping it." See also Birch's *History of Ancient Pottery* (New Ed. 1873), p. 53, which describes Egyptian vases with handles representing "apes seated and holding forepaws to their mouths." Also Furtwängler's *Bronzen von Olympia*, Pl. IX, No. 81, showing "squatting monkey with arms encircling his drawn-up knees."

also Plate XIX, Nos. 68, 73, compare No. 74). The body is often shown covered with hair, indicated by incised dots or minute strokes (Nos. 33, 40, 41, also Plate XIX, Nos. 65, 66, 68, 73, 74, probably also Nos. 23, 36, and Plate XIX, Nos. 60, 64), but quite as often perfectly hairless (Nos. 24, 25, 32, 37–39, 43, also Plate XIX, Nos. 51–59, 61–63, compare especially No. 66 with No. 67). A common musical instrument is the syrinx or Pan's pipe, consisting of seven reeds, and being either of the usual form of an irregular (No. 24), or of a regular (No. 25) tetragon.[11] A kind of harp is seen in No. 34 of Plate XIX, a lute, *ibidem*, Nos. 55 and 70, a pair of cymbals, *ibid.*, No. 60, a small Indian drum, *ibid.*, No. 61, another kind of small drum, *ibid.*, No. 54, a kind of wind instrument, *ibid.*, No. 58.[12] In Plate XIX, No. 56 a monkey is represented hallooing through his hands, and *ibidem*, Nos. 52, 53, 57 whistling with his fingers (unless the act of eating is intended). All this is very suggestive of the earlier and coarser forms of the Greek Satyr and Pan, with his hairy coat, in ithiphallic condition, playing on the syrinx.[13] The aspect and habits of the monkeys readily lent them to such representations. It may be noted, also, that in the Atharva Veda the musical Gandharvas sometimes appear in the form of monkeys, and thus they are clearly related to the Greek Satyrs and Pans.[14] In Nos. 4–6 of Plate IX, probably performing Gandharvas are represented. In Dr. Sven Hedin's collection there is the fragment of a neck of a jar, which shows a whole circle of Gandharvas performing on drums, harps, syrinxes, etc. Noteworthy is the existence of the syrinx on artware of Eastern Turkestan. That instrument has never, so far as I am aware, been observed in Indian art. In Nos. 20 and 26–28 we have the two-humped Bactrian camel which is also seen in Nos. 15, 27, 28 of Plate XIX. The one-humped species is never represented (but see below on Plate XIII, No. 27). In Nos. 29 and 30 we have a horse saddled and mounted. No. 31 shows a leopard.

[11] Both kinds are frequently seen on Greek vases in connection with Pan; thus the regular on Nos. 2900, 3164, 3239, 3240, 3243, 3258, the irregular on No. 4137 in Professor Furtwängler's *Beschreibung der Vasen Sammlung in Aquarium* (pp. 804, 874, 895, 896, 900, 912, 1042).

[12] With No. 58 compare No. 1316 in Professor Furtwängler's *Beschreibung*, representing "an ape, with the left hand raised to the head, with the right holding to the mouth a long, sausage-like object and eating it."

[13] For representations of ithiphallic satyrs, see the old Macedonian coins (of the 5th cent. B.C.) in the British Museum Catalogue, pp. 77, 79, 216. With the satyr *veretrum tenens* on pp. 78, 80, compare Nos. 34, 35 of our Plate. For a human figure in the same posture, see above, footnote 5.

[14] See Professor von Schroeder in *Neue Entdeckungen Buddhistisher Alterthümer in Ost-Turkestan* (Wiener Zeitung, 2nd and 3rd March, 1900).

Plate XI.

This Plate shows a number of heads and busts, male and female. They are all made in the round, and cannot, therefore, have been intended to decorate vessels, like the faces or masks, shown in Plate X; but whether any belonged to full figures, and what use they subserved is, in many cases, not apparent. In the case of No. 16, the head is fixed, with a wooden peg, on a small decorated pedestal, and the whole seems to have formed a kind of knickknack, $2\frac{1}{2}$ inches high. A similar pedestal, found separately, is shown in Plate XIII, No. 8 (also in Plate IV, No. 13, of Part I); and this fact proves that such "knickknacks" were not uncommon. But other heads and busts or half-figures can hardly be explained in this way. On the other hand, fragments of arms or legs or trunks—such as one would expect to find, if any of the surviving fragments belonged to full figures—there are none in the collection, and they do not appear to be found. The large head, shown as No. 1, which is hollow, with a round aperture on the top and in the neck, may have formed the neck of a vessel, like some archaic vases found in Cyprus, Rhodes and other places, and figured in Plate LXXXV of Louis Palma di Cesnola's Cypern (tr. by Ludw. Stern).

All these figures were made in two halves, front and back, in separate moulds, and were afterwards joined together before baking. Some, like Nos. 1, 5, 10, 12 are made hollow; but most of the smaller ones are solid; *e.g.*, Nos. 3, 7, 8, 9, 13–21. The head was sometimes made separately, and provided with a socket bolt (as seen in Nos. 8, 19) with which it was fixed in an aperture between the shoulders. The heads of the busts, Nos. 14 and 15, are fixed in this manner. There was a great variety in the fashion of arranging the hair, of both men and women; also in dressing the beard. The coiffure of men is illustrated by Nos. 1–14; of women, by Nos. 15–21, and 23–26. No. 22 shows a man and woman in embrace; compare their head-dress with those in Nos. 9 and 19. Some male heads approach closely the female type, as in No. 4. Others, as in Nos. 5 and 14, show a sectarian mark, in real life probably painted, on the forehead. On the other hand, No. 13 seems to indicate tattoo marks in the form of dotted circles, or they may be intended to indicate hair, as in Nos. 5 and 12. No. 14 shows a man wearing an amulet, suspended from his neck; but it is not clear what the object may be which he is holding on his back. Nos. 15, 16, 17 show different styles of female coiffure from the front and back. Nos. 18–21, 23, 24, give the front view, and Nos. 25, 26, the back view of some others. Nos. 15 and 18 also show the upper portion of different fashions of female dress. No. 22 shows the head-covering, and jewelry (bracelet, armlet, necklet, etc.), worn by men and women.

Plate XII.

This Plate comprises only antiques of a distinctly Buddhistic character. No. 1 is a portion of a wooden board, measuring about $11\frac{1}{2} \times 5\frac{1}{2} \times \frac{5}{8}$ inches. Left side, top and bottom are entire; on the right side a portion is broken off. It is painted on both sides with sitting figures of Buddha with aureole behind, done in the Indian style. The hair is black in one figure, and blue in the other. Their drapery is in reddish brown, and the nude parts in a pale carnation. The concentric circles of the aureole are alternately reddish brown and yellow. The outlines of the figures also are in reddish brown.

Nos. 2 and 3 are of painted stucco, measuring about $5\frac{1}{2} \times 4''$ and $4 \times 3''$ respectively. No. 2 represents an Apsaras (or female Gandharva), holding a garland, and rising out of a lotus.[15] The lotus is red, the figure white with black hair, the garland also white. No. 3 shows Buddha, sitting, as usual, cross-legged with hands folded in the lap, on a lotus pedestal, and against a double aureole of lotus leaves. The Buddha is fully draped in blue, his hair and top-knot are black, face and hands white. The inner aureole, immediately behind him, is red; the outer is blue, like the drapery. The pedestal is white.

Nos. 4 and 10 are Buddha heads of grey sandstone, much worn, measuring about $4 \times 2\frac{1}{2}$ and $8\frac{3}{4} \times 5$ inches respectively. (The smaller head is also shown in full size in Plate IV, No. 19, of Part I). Peculiar is the arrangement of the hair and top-knot, in the larger head, No. 10, in concentric semicircles, arching over the forehead. I do not remember having observed this peculiar arrangement elsewhere in any representation of Buddha.

Nos. 6, 11 and 12 are carvings in black slate, and of very good Græco-Buddhist art, such as are well-known from the Indus regions. They appear to be the oldest pieces in the collection, and probably do not come originally from Eastern Turkestan. The drapery of the sitting figure on the back of No. 11 is exceedingly good, and suggestive of pure Greek art. No. 6 is the capital of a small Corinthian pillar, measuring $1\frac{1}{2} \times 1$ inches. The upper portion is divided into four sections, containing representations, alternatively, of sitting and standing Buddhas. No. 12 seems to be a portion of a small pilaster, $1\frac{3}{4}$ inches high, with a flat, smooth back, while the front is carved with figures one above the other. The upper one is a kneeling figure, with hands folded in adoration. Of the lower figure only the head remains. No. 11 is a piece of

[15] In the Terracotta Room (comp. 34) of the British Museum, there is a Sicilian plaque (of the 3rd–1st cent. B.C.) in the form of the bust of a winged boy rising out of a lotus. This is the only instance of a similar object that I have noticed in the British Museum or other collections.

slate carved on both sides, and uncertain what it may have belonged to. It measures about $3\frac{1}{4} \times 1\frac{3}{4}$ inches. The front is carved in a series of panels, containing Buddhistic scenes. The middle panel shows Buddha in the witnessing attitude (right hand pointing downwards over the right knee), surrounded by Māra's host. The lower panel shows him in the teaching attitude (right hand raised), surrounded by his disciples. The upper panel is wholly broken off, together with the head of the figure carved on the back. This figure, beautifully draped, is represented sitting on a cushioned stool, the feet placed on a footstool and the right elbow resting on the right knee, the head inclined forward and supported by the right hand. Under the seat is seen a vase or water-vessel, resembling the Indian *surāhi*.

Nos. 5 and 7–9 are of copper or bronze. No. 5 is a piece which appears to have served as the background to a separate figure of Buddha. It represents an aureole made up of an arch formed of several minute Buddhas, each sitting on a stalked lotus. Five of them are preserved; the total number probably was seven. They are shaped exactly like, but only about half the size of, the Buddha figure of No. 7, which is shown in full size. The latter has a knob on the back, showing that it was once attached to an aureole, similar but larger than that seen in No. 5. No. 9 shows a similar series of seven Buddhas, sitting in a level row on the branches of a tree. The whole must have formed the top ornament of some other object. No. 8 shows the usual figure of Buddha, sitting cross-legged and with hands folded in the lap, fully draped, and with a small circular nimbus behind the head. The figure sits on what looks like the imitation of a carpet, and against a similar, nearly circular, aureole-shaped carpet worked with wreaths, hung up behind.

Plate XIII.

This Plate contains a number of miscellaneous objects, among which Nos. 1–3 and 5–9 are of terracotta and come from Yotkān in the Borazan tract near Khotan. Nos. 1–3 are the heads of a boar, a bull, and a horse, and may have belonged originally to full figure animals; or they may have formed ornaments stuck on to the body of vases, like the half-figures of horses springing from some sepulchral vases found in Canusium, Calvi and Capua, and to be seen in the Terracotta Room of the British Museum. No. 5 is a curious head, half man and half beast. It is perforated through head, neck and mouth, and may have formed a spout.[16] This may also have been the case with No. 6, a large ($2\frac{3}{4} \times 1\frac{1}{2}''$)

[16] In the Ashmolean Museum in Oxford there are two archaic vases from Cyprus (of the Geometrical Period) which have spouts in the form of a bull's head and neck.

well-formed phallus, which is perforated, and bears a small inscription (*yā-vu-du-pa-jā-ā*) in Brāhmī characters of about the 5th century A.D., but in an unknown language. No. 7 which, at first sight, suggests a seal-ring, belongs really (as shown by a specimen in Dr. Stein's collection, Preliminary Report, Pl. I A) to a small, narrow-necked vase, of which it forms the handle, being fixed to its shoulder, with the head of the animal (cp. Plate X, No. 31) pointing downwards. Some three-handled vases, shown in Professor Furtwängler's *Mykenische Vasen*, Plates I, 1; V, 28 A, 28 B, are provided with exactly similar handles. No. 8 shows top and bottom of a decorated pedestal of the kind of "knickknack" already referred to in connection with Plate XI, No. 16. No. 9 is a small object in the form of two small peacocks ($2\frac{1}{8} \times 1\frac{5}{8}''$), placed back to back, front and back of the piece being exactly alike; the feet, if there were any, are broken off. What use the object may have subserved is not clear: perhaps it was also a "knickknack."

Nos. 4 and 11 show two very crude figures, animal and human, made of sun-dried mud. I believe myself that they are modern fabrications. They bear, on the forehead of No. 4 and the top of the head of No. 11 the impression of a small oval stamp (like an Egyptian cartouche) inscribed with four "unknown" characters. One of these characters is quite clear, and is identical with No. 33 of fig. 1 in Table I (Formula of Blockprints No. IV). Another is apparently the same as No. 3, *ibidem*. The other two are not distinguishable. As a model for No. 11 may have served some figure like No. 12.

This figure, No. 12 as well as the objects shown in Nos. 13–15, 17–20, 23–26 are apparently made of brass, or very light colored bronze. They are thickly covered with verdigris. Though there is no particular reason to doubt their genuineness, their age and provenance is quite uncertain. This remark also applies to the remaining objects shown in Plate XIII. The two horsemen, shown in Nos. 14 and 15 are those referred to in the Introduction, p. xxi. The saddle-pad on which the riders sit is real cloth, in a very rotten state. No. 17, a plain horse, is hollow, as may be seen from the fracture in front. No. 18 appears to represent a *Garuḍa*, holding a snake in its beak. The body of the snake (on the left in the Plate) winds in a double circle, arranged so as to form a socket for holding another object; and the feet of the bird are set on a small, semicircularly bent plate with which it could be fixed to something else. No. 19, resembling the terracotta masks, is much corroded, and the most antique looking of the lot. No. 20 shows the arrowhead, referred to on page 67 of Part I of this Report.

Nos. 21, 22, 27, 29 and 30 are made of different kinds of minerals. No. 21 appears to be a mould cut into a soft grey stone (soap-stone ?)

In the middle a helmeted soldier is seen sitting on the ground, surrounded by a zigzag line, outside which is seen a large face and some undecipherable writing. The object, shown in No. 27, made of a soft white stone, looks like a single-humped camel, but the completeness of it is doubtful. No. 29 shows a curious object, made of a soft cream-coloured stone, being a grotesque human twin figure, in which every part, except the pair of feet, are duplicated. No. 30 is a pin (broken hair-pin ?) of white jade. There are two such jade pins in the collection.

The two objects shown in Nos. 28 and 31 appear to be made of horn The former represents a dragon (in the form of a spout ?), the latter a pair of fishes (of the zodiac ?).

Plate IV of Part I.

No. 1 shows two sections of what appears to have been a large circular embossed copper-plate, cut up into large quadrangular pieces. Some of these were used as guards in the binding of some blockprint books (see, *e.g.*, No. VII on page 75 of Part I of this Report). Nos. 3, 4, 6–9, and 11 show some pieces of copper, similarly used. Some of these (No. 3) imitate the genuine Urtuqi coin shown in No. 2 (same as No. 20 in Plate I of Part I) and described on page 31 of Part I (see also *ibidem*, p. 54). The genuineness of all these pieces of copper is much open to suspicion.

The other objects, shown in Nos. 12–21 are, no doubt, genuine, though with respect to some of them the age and provenance is quite uncertain. Certainly ancient are the terracotta pedestal, No. 13 (see above under Plate XI, No. 8), the stone head of Buddha, No. 19, and the bronze Sitting Buddha, No. 15. The bronze objects, Nos. 20 and 21, which are much corroded and sand-worn, are also antique. No. 21 shows the front and back of a very curious human figure. The objects, shown in Nos. 14 and 16 are made of a soft grey stone, and appear to be fragments of a casket. The figure of a bird (goose ?), No. 18, is made of brass or pale bronze. It is provided with a knob or botton in the hollowed-out interior, by which apparently it could be fixed to some other object.

Plate XIX of Part I.

This Plate shows a variety of miniature objects, most of which have already been described. For Nos. 2–11, see Part I, Section I, pp. 37 ff.; and for the remainder, see the remarks on Plates VIII–X. The objects shown in Nos. 1, 12–24, and 26 are of metal, mostly bronze; Nos. 21 and 22 seems to be of lead. No. 1 is a sort of sceptre surmounted with a figure of Buddha, No. 18, the same with a closed fist; Nos. 13 and 14 are two rosettes, No. 15 is a two-humped camel, perforated,

perhaps to be worn as a trinket or amulet; No. 17 a sitting lion (?); No. 18 the head of some animal; No. 19 a sitting Buddha; No. 20 a hand with a bird poised on two outstretched fingers; No. 21, a jug; No. 22, a cock; Nos. 23 and 24, apparently two vases.

No. 25 shows four perforated beads, made of different minerals. Nos. 29–36 and 38 are objects made of various kinds of soft stone; No. 37, is of white agate. Nos. 39–74 are made of terracotta. No. 69 seems to be a monkey torso, and No. 71 a monkey mother carrying her young slung on to her back. No. 70 is a curious twin figure, made up of bird (the same as in Nos. 49, 50) and monkey. Every part is duplicated except the pair of arms with which the twins play on a lute (the same as in No 55).

APPENDIX.

Transliteration of

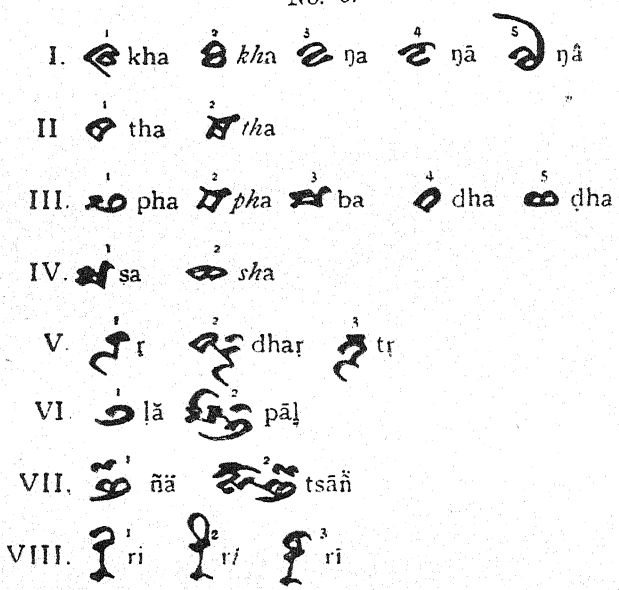
Weber MSS. Part IX and Macartney MSS., Set I.

(See pages 18 and 19 of my Report.)

Note: Many words and letter-groups repeat themselves frequently, and thus afford a fairly safe means of restoring the text. Such restorations are not specially indicated. Restorations which are open to doubt are enclosed in round brackets. Letters which have entirely disappeared but are capable of restoration are shown in angular brackets. Other lacunae are indicated by dots whose number corresponds to the probable number of missing letters. With the help of the two Indexes the restorations can be readily controlled.

The text contains a certain number of new letters which are not found in the ordinary Brāḥmī alphabet. They are shown in the subjoined list:—

No. 6.



No. I, 1 is the ordinary Brāhmī kh as in khadīṛă fl. 19^8 for Sanskrit khadira. No. I, 2 is seen, *e.g.*, in prapuṇḍarikha fl. 10_3 for Sanskrit prapuṇḍarīka. The former is found exclusively, the latter, as a rule, in Sanskritic words.

No. I, 3 is a slightly modified form of the ordinary old Brāhmī ŋ, as seen (*e.g.*) in ŋeteni fl. 28_2 for Sanskrit khedeni, and in the letter-group kaŋi fl. 35_3. It is preserved in the so-called khoŋ-seŋ or "lion-hearted" characters of Tibet (10th century; see Sarat Chander Das in Journal, Asiatic Society of Bengal, Vol. LVII, 1889, Plate V, *b*) and in the Tibeto-Chinese Pa'-sse-pa script (13th century). The signification of the upward curve in No. I, 5, as seen (*e.g.*) in ŋâlya fl. 42_3 is uncertain. Provisionally I take it to be a variant of the mark in No. I, 4, seen (*e.g.*) in ŋākaṁ fl. 12_3, where it is the ordinary Brāhmī mark of the long vowel ā. In the Transcript it is distinguished by â. Both, Nos. I, 4 and I, 5 are very uncommon, and are found only in non-Sanskritic letter-groups. No. I, 3 is found only exceptionally in Sanskritic words.

No. II, 1 is the ordinary Brāhmī th as in ruthiṛ fl. 41^3 for Sanskrit rudhira, and in sāpatha fl. 38^4 for (probably) Sanskrit çapatha. No. II, 2 does not occur in any Sanskritic word, but may be seen, *e.g.*, in the letter-group *th*askemdhaṛ fl. 26_3. I take it to be related to th, as *kh* is to kh, and as *ph* to ph.

No. III, 1 is the ordinary Brāhmī ph as (*e.g.*) in tṛphāḷ fl. 6^6 for Sanskrit tṛphalā. It is found only in Sanskritic words. No. III, 2 is seen (*e.g.*) in *ph*atsañ fl. 38^5, a variant of ptsāñ fl. 4_1 and in çāri*ph*a fl. 8^5 for Sanskrit çārivā. Nos. III, 3, III, 4 and III, 5, which have similar forms, have been added for comparison. No. III, 5 is the ordinary Brāhmī ḍh, as in māḍha*kh*a fl. 12_2 for Sanskrit māṭhaka.

No. IV, 1 is the ordinary Brāhmī ṣ. Both it and No. IV, 2 are seen in prativiṣa fl. 24^5 and prativi*sh*a fl. 28^5 for Sanskrit prativiṣā. No. IV, 2 also occurs in pūrṇako*sh*a fl. 22^5 for Sanskrit pūrṇakoçā; but otherwise it is confined to non-Sanskritic letter-groups.

The exact power of the four new signs (Nos. I 2, II 2, III 2, IV 2) is not known. They clearly indicate variants of the corresponding four Sanskrit sounds, and suggest themselves to be, probably, spirants of the respective classes (χ þ, f, sh).*

No. V, 1, when occurring at the beginning of a word, represents the ordinary Brāhmī cerebral ṛ vowel, as in ṛṣabha*kh*a fl. 6^{4-5} (cf. 13_1) for Sanskrit ṛṣabhaka; but at the end of a word it has consonantal force,

* On these new signs see, also, my paper on the Weber Manuscripts in the Journal of the Asiatic Society of Bengal, Vol. LXII (1893), p. 1 ff., and a paper by Professor Dr E. Leumann on "Eine von den unbekannten Literatur-sprachen Mittelasiens" in the Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg, Série VIII, tome IV (1900). The three signs Nos. III 2, III 5, IV 2 are wrongly identified in these papers. The true identification of the sign No. VI, 1 was first suggested by Professor Leumann in the paper above named.

either with the inherent vowel ă (No. V, 1) or without it (No. V, 2), as seen (*e.g.*) in kesaṛă fl. 18_5 for Sanskrit keçara, and in çakkāṛ fl. 31^4 for Sanskrit çarkkarā respectively. Attached to a consonant (No. V, 3), it has vocalic power, as in vṛka fl. 33^3 for Sanskrit vṛka.

No. VI, 1 probably expresses the cerebral ḷ consonant with the inherent vowel ă, as in pratipaḷă fl. 34^0 for Sanskrit pratibalā, and No. VI, 2 expresses the same without the inherent vowel, as in pippāḷ fl. 21_4 for Sanskrit pippala. In the beginning of a word, No. VI, 1 may have vocalic power, as in ḷttsauñe fl. 9_2. It occurs, in this way, in no Sanskritic word.

The exact signification of the double dot, shown in Nos. VII, 1 and VII, 2 is uncertain. It occurs only with the inherent vowel ă, and would seem to indicate some modification of that vowel. A curious exception is its occurrence with the vowel-less palatal consonants ñ and c, as seen in the letter-groups *ph*atsāñ fl. 38^5, natatāñ fl. 11^6, ktseñ fl. 14^2, pelkïñ fl. 32^3, kauc fl. 14_1. I have transcribed it with a double dot. With the exception of mañcäṣṭă for Sanskrit mañjiṣṭhā, it is found only in non-Sanskritic letter-groups.

There are two forms of the short i vowel, shown in Nos. VIII, 1 and VIII, 2, and seen (*e.g.*) in pippāḷ fl. 4^5 and pi̇ppāḷ fl. 27_2, both for Sanskrit pippala. By way of comparison the long ī is shown in No. VIII, 3. The signification, if any, of the difference of the two forms is unknown. The high-pitched form of i (No. VIII, 2) occurs only 35 times, divided almost equally between Sanskritic words and non-Sanskritic letter-groups. The fact that both forms are found indifferently in the same word (*e.g.*, in pippāḷ) seems to negative the suggestion of any significance.

The numeral figures 1, 2, 3, which occur not unfrequently in the text, seem to subserve the purpose of interpunctuation rather than of indicating numbers or quantities. As a rule, they are placed after words of Sanskritic origin, and thus serve to indicate (or italicise) such words; but they are occasionally found also in connection with non-Sanskritic letter-groups, see, *e.g.*, fl. $4_{4.\ 5}$.

The words, printed interlinearly in small type, represent the remains of writing which, in an inverted position, cross and overlie the large-print words in the line immediately above them. With the help of a mirror, a practised eye can recognize them without much difficulty.

Leaf 1. Reverse.

1 [ma]hāmedha 1 (varaṇga-tvacă) 2 çaileya*kh* 1 akaru 1 spri*kh* 1 devadāru 1

2 [çirişa]-pu*shpha* 1 pra(puntari*kh*) 1 açvakāndh 1 çāri*ph* 1 mañcaşţa 1 çabara-lo-

3 [tṛ 1] veteni 1 nicitakām*ph* 1 kiñcelle 1 pissau 1 erka-[ttse] . .

4 . . . [ki]rodh 1 pu[na]rna[*pha* 1] (kākoţi 1 kşī)[ra-kākoţi 1] .

5 . . [ampṛ]ta-pātṛ 1 bilamati 1

Leaf 2. Obverse.

3 . . . [a]rirā*kha*-şşana ta(notsi 1) arkṇa-ñ(ñai enme)[lya]-

4 [ttse ṇā](kte) māḍha*kh* trau-yṇāre 1 kosnau po (kodh) tara*tha*-şşe

5 . (ṇṇa)le şe-ske se cūrṇä keṇiye ṇe-tts[a] kante *shpha*rka-(*shsha*-lle ṇâ-)

6 . (ñe kşe se-ttsa lāni) yama-*shsha*-lona 1 kete ratre kra(keto-nta alā-)

Reverse.

1 (*shsha*ṁ) . . . ļa alā-*shsha*ṁ . şkara . (dhataṁ ça-)
1 ku ļ sa kre

2 (rkṇāsa) şţal[l]a-*sha*-lle sa *th*askeṁdhaṛ po kre ttauna sakna
. dh ‖

3 . ‖(ji . i) şpati 1 tejapati 1 pāţha [1] . . (ra) . . .

4 . . çabara-lotṛ 1 şesāt*h* sa . *th*askendhaṛ)‖ . . .

5 ‖(māñciştă)
kaṇi trau-nta (ṇâ) pā-tsi 1 toṁ (satke-nta)

Leaf 3. Obverse.

3 . . . şpakaiṁ yama-*shsha*-llona 1 (mo-)tstsa āçne [ya]ma-*shsha*-lle

4 (*ph*arsareṁ) na*kh*=*sha*ṁ mlutā-lle sā*kha*-*shsha*ṁ (smāṁ pāmo) ṇâlya po-tstse

5 kar=tse ‖ ṇär miye-tsa rātre 1 sakāpce 1 sarjayarth 1 . yeya*kh* 1

6 . . . (kutumñci*kh* 1 mi-tstsa tslāñi) yama-*sha*-lona (payro) . *tha*-

Reverse.

1 skeṁdhaṛ ‖ sakāpce 1 çmuṛ 1 ṇeteñi 1 styoneya*kh* 1 toṁ tranmāsaṛ çai-

2 leya*kh* 1 spri*kh* 1 takaru 1 ṇraçkai-şşa pyāpyo 1 tsa pāñcen*tha* ṇṇa(ta 1)

3 . (rkāṛ|) payäceya*kh* 1 tamāla-patṛ 1 ṇämpatsake 1 şe-

4 (me-yär*th*) ṇaṛ *ph*akşa-lle pra-lle syālña

5 . . . (priya)ṇku 1 arirā*kha*-şşana-n*tha* ṇṇata)
[tara]*tha*-şşe . na 1

6 (punarnava)
(sata)

Leaf 4. Obverse.

2 devadāru 1 sarjarath 1
3 . . . madhu*kh*a 1 (dhu)rani 1 çabara-lodṛ 1
4 . 1 malkŋeṛ trau 1 kātso sono*ph*a-lya 1 kuñcīdha-ṣṣe[ṣalype] ma-
5 lkŋer=sa *ph*akṣa-lle 1 yāmusai kātsa muska-*shsh*aṁ ‖ pippā 1 kaṭuka-ro-
6 h*i*ṇi 1 , prativiṣa 1) tamala-pādhaṛ 1 açvakāndha 1 ç*i*riṣa-puṣpä 1 .

Reverse.

1 . . kurka*th*a-ṣṣ*i* ptsāñ̈ 1 devadāru 1 nicitakām*ph* 1 pissau 1 ŋe-
2 tene 1 tranmāṛ kuñcīdha-ṣṣe ṣalype ç*a*k*h* trau-nta malkŋer=sa *ph*akṣalle
3 . ñc 1 *th*aççа te sa saṇāpa-tsi 1 pau-skeṁ sa . na . . .
4 . . . vedene 1 kurkka*th*a-ṣṣi [ptsāñ̈] 1 ka
5 kaṭuka-roh*i*ṇi 1

Leaf 5. Obverse.

2 malkŋeṛ te sa *ph*akṣa-lle [*ph*a-]
3 (kṣa-lle a)çca-ṣṣana te katma po näkseṁ
4 *shsh*aṁ ‖ mañcaṣṭä 1 çabara-lottaṛ 1 tamala-pā(dhaṛ)[1 pi-](ssau 1)
5 cŋācka-ṣṣe mrestīŋe ŋar=sa *ph*akṣa-lle *ph*arçeriṁ na*kh*-*sh*aṁ 1 ‖ sūdha (tharŋā)ñe
6 . . . e er*kh*a-ttse yasoññа kre mīya 1 n*th*a ŋkandha pyāpyo 1 (ḍharta-)

Reverse.

1 (kuṛ lo)ṇtā-ṣṣe . ŋe (sa) trīŋä-*shsh*a-lle *kh*alka-ñc=ṇilu(tpā)l=le-ya*kh*
2 (*kh*etene 1) syā-lle (ŋe)re na*kh*=*sh*aṁ ‖ kaṣṣu 1 takaru 1 açvakān-dha 1 apa-
3 mārga 1 pādha 1 kaṭuka-rohiṇi 1 añcāṁ(vandha) . . . (ñca)1
4 . . ā malkŋer=sa āñmeŋa

Leaf 6. Obverse.

2 nicitakam*ph*a 1 nilotpāḷ 1
3 . (spri*kh* 1) pārivela*kh* 1 kākori 1 kṣīra-kākori 1 [tamala-]
4 pāttṛ 1 ampṛta-pāttṛ 1 medha 1 mahāmedha 1 jī[va*kh*a 1](ṛṣabha-)
5 *kh*a 1 yärpeṛ 1 kiro*kh* 1 erka-ttse sarjaratha 1 çāra*ph*a 1 mañcäṣṭä 1 ve-
6 dene 1 pissau 1 priyaŋgu 1 māḍha*kh* 1 viçīṛ 1 tṛphāḷ 1 punarna*ph*a 1 na-

Reverse.

1 . . (1 çaileya*kh* 1 keṇ*i*ye)[ku]ñcīdha-ṣṣe ṣalype malkṇer=sa *ph*ak-
ṣa-lle .
2 (tstsa) . . (kā ṣalle pāṇe) sa . . (stse) (ārkṇi ya-)
3 (ma-*shsh*a-lle) ‖ prapundari*kh* 1 açvakāndha)
4 . . . kaṭuka-rohiṇi 1 prativi[ṣa]
5 (malkṇe)[r=sa]

Leaf 7. Obverse.

2 . . . [prapu]ndarī*kh* 1 (açvakāndha 1 kirodh)
medha punarna*ph*a
3 . (ārkṇi) caṇāṁ 1 (pissau 1 ampṛta-)pāttṛ 1 kāko[ṭi 1 kṣīra-]
triṇā-ṣle . nda
4 kākoṭi 1 veteni 1 māḍha*kh* 1 kuntar*kh*a 1 çakkāṛ 1 devadāru
5 kirodh 1 pilamātti 1 biḍāri 1 kṣīra-biḍāri 1 çabara-lodṛ 1
6 (ka) . 1 mlucku kuñcidh 1 ṣesā*th* aṣiye malkṇer=sa *shph*arka-
*shsh*a-lle

Reverse.

1 . . (tharṇāna) [ṣṭa]lle-*sh*a-lle 1 tuce pi ye-(tse-ttse ‖)
2 çabara-lotṛ 1 prapuṇḍari*kh* 1 kirodh 1 vetene 1 (kuntar*kh*a)[1 ca]-
ṇā[ṁ]
3 māḍha*kh* 1 mañcäṣṭä 1 çṇaçko 1 (çāñcapo 1 pissau 1) kurka*th*a-
4 [ṣṣi] ptsāñ̃ ṣesā*th* malkṇer=sa ṇâṇkarño *ph*akṣa-lle . .
5 le sa sono*ph*a-lle tumeṁ sātke-nta
[trī]ṇa-ṣle
6 (ka pa la ta ka)
sū ka ra

Leaf 8. Obverse.

2 dhaṛ . . (ṣū) . (ṣe ktseñ̃)
3 . -llona tharṇāna (ṣṭa)lla-*sh*a-lle 1 (pā)ṇe ā(çce) . . .
4 yoraiṁ na*kh*-*sh*aṁ sā ṇâṇkarña-tstsa ṣpakiye kar=tse māka ‖ ca-
5 *y*āṁ 1 padma*kh*a 1 ṇçīṛä 1 pissau 1 çāri*ph*a 1 mañcäṣṭä 1 (kākori 1)
kṣī-
6 (ra-kākori 1) çakkāṛ 1 (sa)ruṇari(ju) 1 akaru 1 takaru 1 (rutelle)

Reverse.

1 ṣesā*th* kutumñci[*kh*] [kosāñme) ṣpakaiṁ yama-ṣlona
2 . (lle) ārkṇi [yama]-*shsh*aṁ ‖ çabara-lodṛ 1 prapuṇḍari*kh* 1 (ta-
mala-)
3 (pātṛ 1 ke)leya*kh*a 1 nilutpāḷ 1 pi(ssau 1 ṣesā*th* ṇar=sa)
4 . . *ph*akṣa-lle mi-tstsa ṣpakaiṁ yama-ṣlona 1
5 arirā(*kh*a-ṣṣana)

Leaf 9. Obverse.

2 rya todh arkɲa-ñai enmelya-ttse
kharth . no ka . tra
3 [l]le tu*kh* ḷttsau-ñe sa ṣpakaiṁ yama-ṣlona (tak=ŋasno todh) ‖
4 tamala-pāttṛ 1 açvakāndh 1 avamārga 1 çabara-lotṛ 1
5 (vedene 1) mañcäṣṭä 1 devadāru 1 ārkɲi-çakkāṛ 1 takaru 1 çiriṣa-
6 puṣpä 1 kirodh 1 ŋatā*tha* nta 1 *kh*anarñata-n*th*a ŋkata 1 kutumñ-ci*kh*a 1

Reverse.

1 (kosnau po) kodh satke-nta (ŋasno todh) rimmākka-ṣṣa pyāpyo (sa ṣpa)[kaiṁ ne]
2 taṣa-lle 1 tarya traiɲo-ṣṣai (mai)ki ne taṣa-lle 1 tu*kh* ḷttsau-ñe sa ṣpa-
3 kaiṁ yama-ṣlona 1 sā amā*rra* . (ṣpakiye) . . tsa-ṣṣana
4 . . na*kh=sh*aṁ .o . . ŋar=ñai 1 (sā) . musaka
5 . . (mañcäṣṭä 1 nilotpāḷ 1 prapuṇḍari*kh* 1 çāri*ph*a)
6 (prapuṇḍari*kh* ŋar=sa)

Leaf 10. Obverse.

2 ‖ (mañcäṣṭä 1 nilotpāḷ 1)
3 [rimmā]kka 1 tamala-pātṛ 1 kar=(tse *kh*anarñata-n*th*a ŋkata 1 ku-)
4 ñcīdha-ṣṣe ṣalype sa *shph*arkka-*sh*a-lle 1 ŋar=sa (ṣpakaiṁ) yama-ṣlo-
5 na *ph*arçeri na*kh=sh*aṁ ‖ mame pi ypa-ttse traksiṁ 1 pissau-ṣṣe kaṣāysa
6 (ṣu*kh*dh lkɲar=ŋa) *shph*arkka-*shsh*a-lle (yere-tsa-ṣṣa vāko 1 ṣukkāṛă . e .

Reverse.

1 . *shph*arkka-*sh*a-lle 1 tharŋanā laiko aṣiye malkɲer=sa (ṣu*kh*dh) *shph*arkka-
2 *shsh*a-lle *th*açça [ke]te kosāñime selaiko tuce pi ye-tse-ttse ‖ [ma]-
3 ñcäṣṭä 1 çabara-lodṛ 1 prapuṇḍari*kh*a 1 (rimmā 1) çāñcapo 1
4 .e . [ça]kkāṛ 1 spaitu 1 ŋetene 1 ypiya (yäkṣīye)
5 [platkāre] *th*açça (kete 1 selaiko 1)

Leaf 11. Obverse.

2 lle 1 tumeṁ toṁ satke-nta 1 . . .
le pale
3 . . . (na)*kh=sh*aṁ ‖ lotṛ 1 çabara-lotṛ 1 mañcäṣṭä 1 prapu-
4 ṇḍari*kh* 1 ārkɲi-çakkāṛ 1 kirodh 1 platkāre *th*açça kete 1 a-
5 (ṣiye) ḍharse-lle 1 selaiko ārkɲi yama-*sh*aṁ ‖ prapuṇḍari*kh* 1 trā-
6 (*kh*aṁ) . (mokra) . (natatāñ) yŋāc=trau çakkāṛ trā*kh*aṁ pissau trā*kh*aṁ

Reverse.

1 (le ko ye-tse asvakāndha 1 medha 1 prapunta-)
2 (ri*kh*a 1 çabara-lotṛ 1 çakkāṛ 1 mañcä)[ṣṭä] 1 ŋetene 1 (su) . . .
(sna)
3 . . netmeṁ spaitu 1 pissau 1 .e dh (*th*aça kete)
4 [selaiko] *ph*arçeriṁ na*kh=sh*aṁ ‖ ama[lā*kh*] 1 (nilotpāḷ) 1 . .
5 (ñai) .e e

Leaf 12. Obverse.

2(ma) . (dhaṛ) . . . (ŋaṛ)
pyapya-ttse ŋelkī
3 ṛă 1 pissau 1 çabara-lotṛ 1 kāla
4 (tran)māṛă 1 kante (*shph*arka) ŋâ*kh*dh trau . . . *ph*akṣa-lle dharyā
kaŋi ṣesā*th*
5 .e-(ṣṣe) *ph*akṣa-lya se ri-tsa ma-tsi ŋakṣāllo-n*th*a kellera
6 . lle ko .o .eŋ 1 (pippā)ḷă-ṣṣa . ḷsdhaŋa ŋadh çaṛ taṣa-llo-
.th *th*aça kete selaiko ñe yama-*shsh*aṁ ‖ pippaḷă

Reverse.

1 [na] . . . (*th*açça kete) . (ŋatre) roṁ *ph*asdh *ph*akṣa-lle
2 (kete astare tumeṁ snailyokai) māḍha*kh*a-nta ça*kh* 1
*ph*akṣa-
3 llona 1 *th*akte ŋākaṁ tumeṁ çci'reṁ) vacca-lle ŋâ-
4 . . . tumeṁ mo-tstsa rā(*tth*e) *ph*akṣa-lya . . ma . .

Leaf 13. Obverse.

2 traiŋo (cā)na-lle
3 [sa]tke-nta-mpa *ph*akṣa-lle
4 madhuyaṣṭi 1 padma*kh*a yŋārc=trau aṣiye malkŋer=sa [*ph*ak-ṣa-]
5 lle se mastu-kā*rth* çeçu ŋeṛ posdhaṁ yama-*shsh*a-lle 1 todh māyi .
6 . (tharŋāna ṣa)ŋo . . .e tthaṛ (ŋe)tene (su)*th*a-*shsh*a-lle eça .

Reverse.

1 . sa *th*askendhaṛ 1 smāyamu 1 jīva*kh*a 1 ṛṣabha*kh* 1 medha 1
mahā[medha]
2 kākoṭi 1 kṣīra-kākoṭi 1 mudgavarṇi 1 māsavarṇi 1 ma(ñcäṣṭä 1 ku)-
3 ñcīdha-ṣṣe ṣalype aṣiye ṣŋarāpksa *ph*a(kṣa-lle)
4 se*kh* tharŋāna (sono)[*ph*a-lle]
. ṛṣabha*kh*

Leaf 14. Obverse.

2 (poke) ktseñ sanāpa-tsi 1 (ŋren*th*e)
3 . . . *th*askendhaṛ 1 ‖ (lā*khsh* 1 pissau) [ça-]
4 (kkāṛ 1) çmuṛ 1 (sacca-ṣṣa) ŋi . ko 1 kleŋka 1 . . . [ypiya]
5 yākṣiye 1 te (tailŋī)*shph*ärkka-*shsh*a-lle 1 kṛŋkai-ññe maiki salype
6 . . ñorīya kātso ŋâ ·o-tstsa tā . te sa *ph*asdh sa*th*a ‖ ŋâ . .

Reverse.

1 çkŋaçko 1 smuṛ 1 kṛŋk[ai]-ñai (maiki) sa kauċ 1 caŋke sa kātso sono[*ph*a-]
2 lya çāṛ kātsa sa ŋala na-lle ça*tth*a-*shsh*a-lle caŋke te nau-ttse *th*a-[skeṁ-]
3 dhaṛ ‖ medha 1 mahāmedha 1 kākoṭi 1 kṣīra-kākoṭi 1 . . .
4 . [1] ṛṣabha*kh* 1 mudgavarṇi 1 . . . 1 ma(ñcäṣṭä)
5 tami (ṣa)mma aṣiye mal(kŋer=sa)

Leaf 15. Obverse.

3 . . 1 çatapuṣpa 1 caŋāṁ madhu[yaṣṭi] . . . [apamā-]
4 rga 1 su(h*i*) suratha 1 çiriṣa 1 koroça ka 1 [ṣeme-]
5 (ya)*rth* satke-nta eṣe pu(ṣne) eṣe rohini (kete) satke-nta ŋaltsa 1
6 .i . .e . (ta)ṣṣa-lle (se) ŋ*i*sumat*ph*a po ŋisumat*ph*a . .e .

Reverse.

1 (kaṭuka-rohiṇ*i*) 1 apamārga 1 açvakā[ndha] 1 [tama]la-pāṭṛ 1 [ko-
2 (sdhe sā)tke-nta ŋasno todh takaru malkŋer=sa ṣpakīye yama[-*sh*a-
3 (lya sā) ṣpakīye yama-*sh*a-lya sā ṣpakī(ye .inä sa) . .
4 [ta]māla-paṭṛ 1 (mahiṣa) 1 prapuṇḍa(ri*kh*a)

Leaf 16. Obverse.

6 [ā]rkŋ[i] . .*kh* . .

Reverse.

2 ṣṣa . ‖ . n*kh* . . t*th*a
3 [ṣa]lype *ph*akṣa-lle pra-lle
4 po na*kh*=*sh*aṁ . .kira

Leaf 17. Obverse.

2 (kaṣka cŋā)
3 pi pra-lle ‖ (jiva)[*kh*a]
4 . (me)[dha 1 kā] koṭi 1 kṣīra-kākoṭi 1 (māḍha*kh*)
5 . c*i*tra no(ka . 1 (kuça)nāṛ kālkŋe sa . . no(ka)
[mā]ḍha*kh* . (na*kh*=*sh*aṁ)
6 āye 1 dha au . . rā . . (seka ṣā) . . .
dhaka .e

Reverse.

1 . . trau-nta lī (pāṇ́ 1 ŋâk=trau)-[nta] *shpha* malkŋeṛ ṣeme-yärth . . . [ku-]
2 ñcīdha-ṣṣe ṣalype 1 nastu-kārth eça te ne kar=tse pāŋe sa *shpha*taṁ stsi
3 nastu-kar*tha*-nta ne*sh* çpālmeṁ se cipa nidha(rbe) ‖ . ‖ cīpa(*kha*)
4 . . . [pra]hati 1 kaṇḍāri 1 (kiro*kh* 1)[tama]la-[pāṭṛ] . .
5 (pippāḷ 1) puna[rna*pha*]

Leaf 18. Obverse.

2 ñca kaŋ[i]
3 la*kh* pāŋe yama-*sh*a-lle .ānem . . . ‖ . . .
4 (açca sa'nāpa-lle-nta 1 ‖ kutumñci*kh* 1 s[u]māṁ 1 (sprī*kh*) 1 tamala-pā-
5 (ṭṛ)1 varaŋka-tvacä 1 nakunakhi 1 sakāpce 1 sarjarath 1 hrībera 1 rkŋa
6 . . (ma) ('āko) .e .e . . sātke (kŋāñcīdha-ṣṣe) ṣalype

Reverse.

1 . 1 ‖(rasecanaṁ) 1 akaru 1 sukṣmeḷ 1 tamāla-[patṛ 1] (çari*pha* 1 madhu)[yaṣ](ṭi)
2 (prapuntari*kh* 1) nilutpāḷ 1 viraŋ*kh* 1 hrībera 1 (çariva pārivela*kh* vara-)
3 (ŋga-tva)cä 1 çāri*pha* 1 sālavarṇi 1 pṛçnavarṇi 1 musdha (vapa)
4 . .e . . ti 1 çātapari 1 hareṇu
5 kesaṛă 1 .e .e

Leaf 19. Obverse.

2 1 (pṛçna)[varṇi]
3 ŋedha 1 khadiṛă 1 tama[la-pāṭṛ]
4 çaileya*kh* 1 nilutpāḷ 1 prapuntari*kh* 1 çāri(*pha* 1 mus)dha 1 nāga-pa-
5 (tṛ 1 pissau 1 çkŋa)çko 1 cautānä 1 harid[r]a 1 iñcuŋa 1 . . . 1 tṛphāḷă
6 kuçanāṛ (ṣeme-yärth keŋ)īye kŋāñcīdha-ṣṣe ṣalype [ṣe]me · ma-

Reverse.

1 [lkŋe](r=sa) *pha*kṣa-lle 1 ‖ karuṇasāri 1 (punarna*pha* medha) tṛphāḷ 1 (nilutpāḷ 1)
2 (pissau) 1 çkŋaçko 1 cautāṁ 1 piṣitaka-mantha 1 kurka*tha*-ṣṣi ptsāñ tamāla- ka
3 patṛ 1 ṣeme-yärth keŋīye kuñcīdha-ṣṣe ṣalype . mal-kŋe-
4 (r=sa *pha*kṣa-lle se ṣalype a(cala) suttha ·iña . ‖
5 kurka*tha*-ṣṣi ptsāñä

Leaf 20. Obverse.

2 (bhṛŋkaracä 1 karuṇasāri)
3 . . [tama]la-pāṭṛ 1 māṣikāni 1 (te curnä)
4 . . . i modha-ṣṣe ŋar=sa *ph*akṣa-lle 1 ṭṛphāḷ 3 puta-
5 [nakeçi] ṭṛ . . .ä 1 punarna*ph*a 1 kurka*th*a-ṣṣi ptsāñ̈ . . .
6(çi-ṣṣa) tāno 1) e

Reverse.

2 kŋe-ttse
3 . . (*ph*)a*kh*s*h*a-lya (ŋâŋkolma)-ñña āy(o) . . . 1 ma . .
4 lle te(po ṣeme-ya*rth* ko)[sdhe]

Leaf 21. Obverse.

2 (*th*a-tsa) . (ko)
3 riñña 1 ‖ rasa[ñ]ca(nä) 1 bhṛ[ŋkaracä]
4 . . sittā*ph*a 1 karuṇasāri 1 çabara-lodhaṛ 1 p*iṣi*[taka-]
5 [mantha] . . (ka) ki . . .ā

Reverse.

1 (ntari*kh* 1 caŋāṁ 1 tranmāṛ saṁtke-nta amalā*kh*a piçtro-ntha) . . .
2 . . *kh*a ku ṣpakaiṁ se) *ph*akṣa-lle keŋiye kuñcīdha-ṣṣe (ṣalype sa)
3 āçce sono*ph*a-lya kar=tse māka 1 ‖ cautāṁ 1 (çkŋaçko 1 nilntpāḷ)
4 pippāḷ 1 (pissau 1 kurka*th*a-ṣṣi ptsāñ̈ ṣe[sā*th*] . .
5 tāno 1 kodh (‖) sā(tke-nta ŋasno todh) . . .

Leaf 22. Obverse.

2 (ŋka erka-ttse pra) . (.ā*rth*a)
3 . . . tse kuñī mo-tsa kālko yama
4 . . *ph*akṣa-lle 1 erkeñce pi kuñcīdha-tts(e ṣalype . . .
5 (lle-ttse) pūrṇako*sh*a-ñña 1 ‖(nilutpāḷ 1) . . tāŋa
6 malkŋer=sa elkŋe .e . . .

Reverse.

1 . lle erkeñce p*i* kuñcīdha-ttse ṣalype
2 smāṁ pāmo*sh* ā-tstse luta-ṣṣe-ñca ‖ sumāṁ 1 (spaitu) 1 kodh ypa-
ttse [tra-]
3 ksiṁ mita-ṣṣe ŋar=sa *shph*arka-*shsh*a-lle 1 pla[tkāre *th*aççа ke]te
(1 ŋra-)
4 [ttse] *shph*arka-*shsh*a-lle 1 todh toṁ satke-nta (tarye)
5 . . . (mañcaṣṭä 1 prapuntari*kh* 1)

Leaf 23. Obverse.

2 . . . [mañca](ṣṭa 1 pippā)ḷ 1 (kuñcīdha-ṣṣe)
3 . kuntar*kha* 1 kodh toṁ po kodh (*tha*)skeṁ(dhaṛ)
4 lai)ko tuceṁ ere na*kh*=*sha*ṁ ‖ pissau 1 s(umāṁ 1 çāri*pha*) 1 mañca-
5 (ṣṭä 1 ça)kkāṛ 1 platkāre *tha*ça kete 1 selaiko ypiya yäkṣīye plāt-
kāre
6 *tha*ça kete)1 malkṇer=sa *shpha*rka-*sha*-lle (selaiko) ‖ .(toke)

Reverse.

1 (le) dhṛ
2 [tama]la-(pā)tṛ 1 (çatapuṣpa 1) surasa-patṛ 1 (nicitakam*pha* 1)
puna-
3 [rna*pha* 1] kuṣṭa . . . 1 (pissau) 1 mañcaṣṭa 1 cautāṁ 1 (ṇetene 1)
4 . . . tuk 1 rasna 1 hrībera 1 ku
5 (caga)la cipa*kha* 1 ṛṣa[bha*kha*]

Leaf 24. Obverse.

2 sa kuçaneṁ satke-nta 1 (açvakāndha)
3 . . [ku]ñcīdha-ṣṣe ṣalype todh keṇiye 1
4 . ‖ . ‖ takaru 1 açvakāndha 1 devadāru 1 prapuntari*kh* 1
5 (çatapari, 1 kākori 1 kṣīra-kākori 1 pippalī 1 prativiṣa 1 ka-
6 (ka o) . . (mañcaṣṭa 1 musdha 1) . . (dhari) . . . (mi) . .
‖sa ne

Reverse.

1 (erkeñce pi) . . . (vari)
2 . . . ṛ .u la 3 bhargi 1 (açvakā)[ndha]
3 *kha* 1 atibala tamāla-pa[tṛ] . . . 1 (sprī*kh*)
4 . . . hrībera 1 sumāṁ 1 nil(utpāḷ)
5 ñca vi ·i 1 kaṭu[ka-rohiṇi]

Leaf 25. Obverse.

2 (bhalātaka 1 ṛṣabha*kha*)
3 pṛçnavarṇi 1
4 . . sukṣmeḷ payasya 1 jīvanti 1 bhalātaka 1 . . (viraṇka)
5 . . kabīja 1 (añcana-rasa) 1 (kanaka)-puṣpa 1 1 ka-
6 ca 1 (p*i*ppalī)
‖ dhuka . ḍhuka

Reverse.

1(ñcī rabi) . ri 1
2 . . nta sa(te)ra . (stu) ‖ nicitakampä 1 . (katma) ‖ açvakā-
3 [ndha] . katma 3 kaṭuka-rohini 1
4 . . (taka)ru 1 tamāla-patṛ tr[au] ka
5 1 prāṭivi*sha* 1 tr[au] . r*th*

Leaf 26. Obverse.

2 u pā(liña) ‖ mā[ñciṣṭä]
3 trau-nta 1 tara*tha*-ṣṣe (pyāpyo) . . *kha*
ṣeme
4 . . ‖ lotṛ 1 capraṣṭo 1 ampraṣṭo 1 priyaṇgu (kuntar*kha* tranmāṛ)
ntha rī
5 . . . yojaṛ *kha*(nthe) ṇâ*khdh* trau-nta 1 dharyā kaṇī trau-nta ṇâpā-tsi 1
6 . . . (tamala-pādhaṛ 1 a)karu 1 çaileya*kha* 1 (pissau 1 mañcaṣṭä 1) . .

Reverse.

1 *tha* (tri)*kh* toṁ (kalka-ṣṣa) . . . (dhaṛ) . . .
2 . [ṣa]lype 1 ṇâk=trau-nta se (ṣalype) çāñcapo-tse 1 mi(sa) . ṇe . . (*tha*)
3 . . sono*pha*-lle 1 prakarya ne *th*askeṁdhaṛ 1 . pra-lle po
4 pipāḷ 1 kurka*tha*-ṣṣi
5 i ṇarṣe ku . . 1 (ku)

Leaf 27. Obverse.

2 (çkṇaçko enmelya-ttse ṇā)[kte] ,
3 ye ça*kh* 1 trau-nta kuñcīdha-ṣṣe ṣalype ma[lkṇer=sa].
4 (ārkṇi) māka yama-*sha*ṁ ‖ lā*khsha* 1 [mā]ñciṣṭä 1 iñcu-
5 [ṇa] . . 1 tecapati 1 kuṣṭa 1 (çata)pari 1 prapuntari*kha* 1 çabara-lo-
6 (tṛ 1] (.eṁṇa)ya

Reverse.

1 . (malkṇer=sa kātsa sanā)pa-lle ‖ açvakāndha 1 apa(mārga ni-)
2 (citaka)m*pha* 1 prapuntar*ikha* mañcaṣṭä 1 p*i*ppāḷ 1 p*i*ssau 1 (snn*i*-yer=ka-)
3 (rña-ñña) kuñcīdha-ṣṣe ṣalype malkṇer=sa 1 nici(takam*pha*) 1 açva-
4 [kāndha] (apa) mārga 1 caṇāṁ 1 tamāla-patṛ 1 .e
5 . . . [ṣa]lype malkṇer=sa *ph*akṣa-lle
6 pissau 1 ma[ñcaṣta]

Leaf 28. Obverse.

2(ku) . (lle)
3 . açvakāndha 2 kuçānem̀ 2 manota(ci) (kucā)[nem̀]
4 çkṇaçko 2 devadāru 2 karocuki 1 toṁ (ṇyaṛ) kuçānem̀ prapu-
5 (ntari*kha*) kuçāne[ṁ] 1 tamala-pātṛ 1 prativi*sha* 1 ṇetene 1 pippāḷ 1 ku-
6 [rka*tha*-ṣṣi] ptsāñ̃ (toṁ kuçanāṛ) 1 keṇ*i*ye ku(ñcīdha-ṣṣe ṣalype) . . .

Reverse.

1 (putanakeçi 1 ta)karu 1 (devadā)ru 1 prapuṇḍa-
2 [ri*kh*a 1 ça]bara-lotṛ 1 māḍha*kh* 1 . y*i* ŋetene 1 kaṣka pippāḷ 1 pi-
3 [ssau] k*i*rodha 1 apamārga 1 tamala-pātṛ 1 çkŋaçko 1 enme-[lya]-
4 [ttse ŋā](kte) toṁ kuçanāṛă 1 kākori 1 (kṣīra-kākori 1) . .
5 . . . [kaṭuka]-(ro)h*i*ṇi 1 (prativi)[ṣa]

Leaf 29. Obverse.

2 [ypi](ya yäkṣi)[ye]
3 . (ca)[tri]ŋa-ṣle 1 ‖ tamala-pātṛ 1 [ça](kkā)[r]
4 . . mañcaṣṭa 1 apamārga 1 prapuṇḍari*kh*a 1 udumba[ri]
5 . . (1) ŋetene 1 kirodha 1 devadāru 1 pissau 1 nicitakam*ph*a
6 . (kuñcīdha-ṣṣe) . . (ṣalype keŋiye malkŋer=sa *ph*akṣalle) .

Reverse.

1 . (rna kātsa) sanāpa-tsi *shph*a po (ne) kar=tse ‖ kŋärka*th*a-ṣṣi ptsāñ
2 rsiḷ 1 prahati rasna 1 māñciṣṭä 1 devadāru kaṣka 1 la*khsh* 1 s[i]tta-
3 *ph*a açvakāndha 1 prapuntari*kh* 1 çaileya*kh* 1 dha . . .e .
4 . dharaṇi 1 ṣeme-yar*th* sā(tke-nta)
5 (pa-lle)

Leaf 30. Obverse.

2 [ma]lkŋer=sa
3 (çakkā)ṛ pissau 1 vetene 1 (mañcaṣṭä)
4 . . .ese tsuŋä-*shsh*a-lle toṁ tarya tsuŋä
5 . tharŋāna 1 *th*aça ne kātso 1 poke ktseñä 1 ārkŋi pāŋe yama .
6 . (ske) ‖ tamala-pātṛ 1 varaŋga-tvacä 1 çaileya*kh* 1 (naladh 1 akaru)

Reverse.

1 (parive)la*kh* 1 jīva*kh*a 1 (ṛṣapa)[*kh*a] 1 (rŋa)
2 çabara-lotṛ 1 trphaḷ 1 prapuṇḍari*kh*a 1 māñci(ṣṭä 1 pi)ssau me-
dhas
3 yärpeṛ sprī*kh*a 1 ŋetene 1 takaru 1 po (kuçanāṛ) keŋiye
4 [kuñcīdha]-ṣṣe ṣalype malkŋer=sa (*ph*akṣa-lle āçce)[sono*ph*a lya]
5 o . . (le kete) .e sono*ph*a-lya po

Leaf 31. Obverse.

2 (na) *th*askeṁdhaṛ po-tsi)
3 [sa](tke)-nta ‖ ktumñci*kh* 1 açvakāndha 1 [ku-]
4 ntar*kh*a 1 ārkŋi-çakkāṛ 1 ārkŋi-kiroth 1 ārkŋi-ŋetene 1 arkŋa-
5 ñña*i* enme-lya-ttse ŋākte 1 ŋatā*th*a-nta 1 kalāska . na-n*th*a ŋkata 1
6 (te po) ṣeme-yär*th* (kosdhe) ŋasno todh (rimmākka-ṣṣa) pyāpyo
(sā) ṣpa-

Reverse.

1 kiye (kŋer=se-ttse) 1 ‖ tṛppāḷ 1 ṛskarñe 1 eñcu[ŋa-ñe] ke .kh .
[ŋâŋ]ko-
2 lma-ññe āŋ*kh*aṛ te ṣeme-ya*rth* kuñcīdha-ṣṣe ṣalype sa triŋä-ṣle
3 āçne lupṣa-lle 1 ā-tstse ma-tsi *th*askedhaṛ 1 kar=tse 1 ‖ tṛ-
4 ppāḷ açamati 1 sumarāḍha 1 (praŋkaracä 1)
5 . . [ma]l[kŋ]er=sa (*ph*arkṣa-lle) *ph*arsare-n*th* sâtke 1 ‖
6 (ŋaça)

Leaf 32. Obverse.

2 . . .l . (ŋŋaŋa) . (kane kennā)lyīnā-lle (malkŋer=sa) . . .
3 (nna) *ph*arsareṁ-n*th* pelkïñ ‖ tṛphāḷ 3 (nicitaka)[m*ph*a 1 prapu-]
4 ntari*kh* 1 nilutpāḷ 1 cautāṁ 1 pissau 1 priyaŋku 1 kurka*th*a-ṣṣi
5 ptsāñ 1 sumagandhä-ṣṣa tāno 1 prŋkaracä 1 karuṇasāri 1 pūta-
6 (nakeçi 1 tamala-pātṛ 1) sakāpce 1 kaṣka 1 çkŋaçko 1 çaileya(*kh* 1
açva-)
ŋâ*kh*(dh)

Reverse.

1 (kāndh 1 kuraḷä 1 smuṛă 1) sarjaratha 1 (sprī*kh* 1) . . kça . . .
(akä) .ai .eke
2 .u.khuma*kh*a 1 rkāṛḷ 1 pyapya-ttse ŋelkī 1 (eñcuŋa-ñe ke-tse) 1 te
ṣṣe
3 ṣeme-ya*rth* satke-nta 1 skrena-ttse paruŋa (mlutā)-*sh*a-llona-t-*pha*-
4 kṣa-lle saṁtke-nta-mpa skrena-ttse ka . . (la*kh*)
pha
5 (.eṛ miye . (lyī)nā-lya(ṣke) kkau-ttsa eŋe

Leaf 33. Obverse.

1 *th* sā(tke)
2 . (.u kṣu smāḍha) . rtsa perā(th) ‖ pippa(lī)
3 a . i . l vṛka 1 saindhava 1 vaca a(jamoda)
4 (kara) 1 citraka 1 māṣikāni 1 te curnä yama-*sh*a-lle 1 kuñcī-
5 [dha-ṣṣe ṣa]lype sa *shph*arka-*sh*a-lle tumeṁ *ph*arŋe-ttsai mālasa
yoka-lle
6 yo(ŋaṁ pre-tsa *th*askeṁtṛ) 1 ‖ amalā*kh*

Reverse.

1 (trau-nta-ttse 1 yŋāc=trau 1) tamalapātṛ trau 1 toṁ . . [ma](lykka-
çke) [kkau-](ttsa)
2 na-lle 1 kuñcidha-ṣṣe ṣalype ŋâk=trau-nta 1 malkŋeṛ dharyā kaŋī
trau-ntā
3 ŋla-çkeṁ pū ŋar=sa *ph*akṣa-lle 1 āçce sono*ph*a-lya (ker.ipe) pā-
4 rera ma-tsi *th*askedhaṛ po kar=tse 1 ‖ ārkŋi-(ŋe)[tene] . .
5 . . 1 pissau . . . 1 (ypiya yäkṣiye platkāre)[*th*açca kete]
6 (rtha ŋaka)

Leaf 34. Obverse.

1 (kar=tse ‖ ka)
2 . . . ŋa(yi) . ta 1 açvakāndha 1 (apamārga)
3 tṛ 1 çatapuş*phä* 1 pissau 1 kosdhe sa(tke-nta) ŋa[ltsa 1 nicita-]
4 kam*pha* 1 kuñcīdha-ṣṣe ṣalype ṣeme pāke ma(lkŋer=sa *pha*)kṣa-lle
5 se ṣalype *th*aça ne sanāpa-tsi 1 te no çāṛ tsuŋä-*sha*-lle 1 açva-
6 [kāndha] 1 kuntar*kha* 1 pratipaḷä 1 (kakoṭa*kha* 1)
keŋiye

Reverse.

1 . . ‖ . (ŋke-ññai) . k . rtse ke .ŋa 1
le sa . ai . *sh*ekse
2 (pyāpyo) ḍhartakuṛ 1 spaitu 1 . . yesmi . . ca . (pi) sa ṣpakaiṁ
sa
3 yama-*sha*-lona *kh*alka-ñcä laupa-tsi kar=tse ‖ tamala-pātṛ
4 çabara-lotṛ 1 māḍha*kha* 1 mañcaṣṭa 1 aṣiye mrestīŋe .
5 . . (malkŋer=sa) . . . (ça*kh*) (le)

Leaf 35. Obverse.

1 uḷ 1
2 . . . ca . . . kirodha 1 (takaru putana)[keçi] .
3 ya*kh* 1 apamār*kha* 1 [deva]dāru 1 [punarna-]
4 (*pha* 1) sprī*kha* çarī*pha* 1 kṣira-kākori 1 nicitakam*pha* 1 .
5 .r.e . . ṣalype .ai kuñcīdha-ṣṣe ṣalype malkŋer=sa *pha*-
6 [kṣa-lle] [kā](tsa) sanāpa-lle ‖ takaru 1 sakāpce 1 tamala-
cŋäcka . n*th*a ŋŋata

Reverse.

1 pātṛ 1 (pārive)la*kh* 1 devadāru 1 (sā)pādh 1 ‖ tṛ[phāḷ]
ṣalype . . āçne
2 ṣṣe . . le eñcuŋa-ñe ke-ttse 1 tsa pāñce-n*th*a(ŋŋata . ŋkaṣ)kath
3 trau-nta sŋese-ṣṣe ŋaṛ 1 ṣkaska çkŋārat-ske-ts*i* dharyā kaŋi-tsi 1
4 [dha](ryā) kaŋī malkŋeṛ 1 seka(ṣa .ä *pha*kṣa-lle musdha) . .
se ṣalype
5 (ka) . . . 1 canā
6 (*shph*arka)

Leaf 36. Obverse.

3 . . . (ṣe)sā*th*a 1 eṣe *pha*kṣa-lle
4 . lle *pha*rsareṁ-n*th*a sātke ‖ piṣitaka-mandha 1 (gandha) priya[ŋgu]
5 . . . (1 lotṛ 1) nilutpāḷ 1 motarte 1 kotri*kh* 1 sittā*pha* 1 te sa m(o)
6 ā-tstse luta-*sha*ṁ mlutā-lle (sā*kha*-*shsha*ṁ) ‖ (ma-)
tha

Reverse.

1 (ñcaṣṭä 1 akaru 1 tamalapātṛ 1) . haridṛ 1 (pissau 1 balā 1) prapunta
malkŋer=sa ntha ṛ
2 rikh 1 sukṣmeḷ 1 (vi)raŋkh 1 nilutpāḷ 1 hṛbera 1 keleyakh 1 pari-
3 velakha 1 varaŋga-tvacā 1 musdha 1 çarapha 1 sālavarṇi 1
4 pṛçnavarṇi jīvanti 1 devadāru 1 (çatavari 1)
5 . . .i 1 (çata)[puṣpa] (ndhä) 1 pa . . 1 ke .ā

Leaf 37. Obverse.

2 (ya 1) (satke-nta) . . [dharyā]
3 kaŋi ka-llona kre mo-tsa āçne ya[ma-sha-]lle
4 pharsare-nth sātke ‖ çakkāṛ 1 devadāru 1 çāñcapo kuñcī-
5 dha 1 traiŋo-ṣṣai maiki sa shpharka-sha-lle 1 platkāre thaçca kete
1 selaiko
6 . .ai .e (nakh=shaṁ) ‖ l(ākhsha) 1 sittāpha 1 ka i .
ṣpakaiṁ

Reverse.

1 (ko kleŋkarya) pissau (ysārña yä)kṣiye 1 . kuñcīdha-ṣṣe ṣalype
sa shphä-
2 rka-shsha-lle 1 yo-tsa triŋä-sha-lle 1 tumeṁ kātsa sa laupe yāmu-
sai te sa
3 ka-tso malyakka thaskedhaṛ māylārya ‖ açvagandhä [1 apa-]
4 märga 1 takaru 1 prapuntarikha 1 mañcaṣṭa 1 (nici)[takampha]
5 . . (toṁ sa te) [po ṣeme]-yarth kosdhe 1 (po) . .o
6 tharŋ[āna]

Leaf 38. Obverse.

1 (ku)
2 . . phakṣa-lle (taṣa-lle mā)
3 nailñetha ‖ tamala-pātṛ 1 varaŋga-[tva]cä
4 sprīkha 1 takaru 1 smūṛ 1 ṣesātha (sāpatha) vai(çra)mañña 1 ‖
5 (tṛppāḷ)1 cautāṁ[1]suma[gandhä] kurkatha-ṣṣi phatsāñaicärke 1 e-
6 (ñcuŋa-ñña ke-ttse) . . . kuñi (ma)dh ts(uŋä-sha-lle tumeṁ) . .
sha-

Reverse.

1 (lle) . . . (yama-ṣlona ṣeme-yä)rth saṁ(tke-nta kŋäñcīdha-ṣṣe)
ca
salype
2 sa āçne yama-sha-lle 1 ā-tse luta-shshaṁ pharsareṁ nakh=shaṁ 1
ārkŋi 1 ca-
3 ŋāṁ 1 prapuntarikha 1 pissau 1 çakkāṛ 1 khanarñata-ntha ŋka'ta)
4 mlucku kuñcīdha 1 te po ṣeme-yärth . ka
5 . . lle 1 ye-tse[-ttse] thaskedhaṛ (sā ṣpakīye ka)
6 (tha-ñe)

Leaf 39. Obverse.

3 . pissau (çkŋaçko) kurka*tha*-ṣṣi ptsā(ñ̈ ka)
4 . ṣalype malkŋer=sa *ph*akṣa-lle açca sanāpa-lle 1 (kaṇḍāri)
5 (prapunda)ri*kha* 1 kaṭuka-rohiṇi 1 açvakāndha 1 devadāru 1 pissau 1
6 [ŋet]e[n]e (1 apamārga 1 kosdhe po saṁtke-nta todh) ṣe-ske ta . . .e .

Reverse.

1 (ma)lkŋer=sa trīŋā-*sha*-llya ṣpakīye 1 (pilkŋer=sa rīŋka-tṣi sā ṣpakīye) nta
na ṣpakaiṁ
2 kākori 1 kṣīra-kākori 1 pitari 1 kṣīra-pitari 1 smuṛ 1 ysārña yā-
3 kṣīye 1 mi-tstsa *shph*arka-*shsh*a-lle 1 kṛŋka-ñña yo-ttsa laupe kā-
4 (tsa) yāmusai te sa kā-tsi prakara . (sna)
5 . (takaru) 1 yä[rpeṛ]

Leaf 40. Obverse.

2 . . ‖ (arkŋa-ñña*i*)
3 . . tama[la]pāṭṛ* 1 (pārivela*kh* 1 mañcäṣṭä 1)
4 . (toṁ) satke-nta kuçanāṛ çeriye enmeṛä (çkŋaçko cautāṁ)
5 (modha)-ṣṣe ŋaṛ tanā-ṣṣe ŋaṛ ça*ṣkh*ath trau-nta 1 te (e)ṣe pepa kṣormeṁ a-
6 (ṣiye i) .e (ne ta)ṣa-l[l]e ysā(rñ)ai ne ŋadh ñkañcai ne ŋa(rn*th* rkhe) .o .e.

Reverse.

1 . . . (ta)ṣṣa-lle (ta)yā (kṣo)rmeṁ ŋe(yaṁ) ṣu*kh*dh (ko)-ttsa edha-ntā(rme ŋa-tstsa)
2 tharŋā(na) sono*pha*-lle 1 meñä-mpa ene çle tharŋāna *th*asken-dhar=ne 1 p*i* ka-
3 tma thaŋkiṁ yoraiṁ po na*kh=sha*ṁ se ce ṣalype sono(ptṛpo) . .
4 [ka]ŋi kennarne ama(lā*kh* 1) rŋakca (yām=tsi)

Leaf 41. Obverse.

2 . . . akaru [pu-]
3 [na]rna*pha* 1 ru(thi)ṛ 1 . . . palamā(nta) [kāko-]
4 ri 1 kṣīra-kākori 1 medh 1 mahāmedha 1 (mañcaṣṭa 1) pri[yaŋgu]
5 takaru 1 apamārga 1 çabara-lotṛ 1 kirodh 1 . . a*kh* 1 parivela*kh* 1
6 (sprī*kha* 1 na)ladha 1 ŋetene 1 nicitaka(m*pha* 1 sarjaratha 1 ṣeme-yar*th*)

* The syllable *la* is omitted in the original manuscript.

Reverse.

1 (to)dh keŋiye todh kuñcīdha-ṣṣe aṣ*i*ye malkŋer=sa taṣṣa-lle . .
2 ro-tstse (kai) pauke ktseñ=tsa sanāpa-lle 1 kar=tse māka keŋ-karñña-ñña ‖ (su-)
3 (rasa)-pāddhaṛă 1 tamalapātṛ 1 takaru 1 (sprī*kh*a 1 ku)rka[*th*a-ṣṣi]
4 . kuŋa 1 (smuṛ 1 sarjara)tha 1 m(lucku kuñcīdha-ṣṣe) . . .

Leaf 42. Obverse.

2 . . (nalyī te)
3 . ŋā-llona 1 pi-ttsa montaruŋ ā-llona
4 (ca)rsnā-llona ḍhatka roṁ *ph*asdh slaŋ*kh*a-llona toṁ saṁtke-nta (ŋra-)
5 ttse kātsa ne makŋa-*shsh*a-llona 1 tumeṁ ŋra-ttsai sra-(lle) 1 sāṛḷ skŋaṛ ñŋe
6 . . (ne)ta (ma)lyaka (çke kk)au-ttsa . ŋa(se pi)ye (.elīna-lle) . .eṁ

Reverse.

1 . (lkŋaṛ e .ŋe) slaŋ*kh*a-lya eṣe satke-nta . (su*th*a)-*sh*a-lya ṣpakaiṁ (ya)-
2 ma-ṣlona ā-tse luta-*sh*aṁ mlutā-lle sā*kh*a-*shsh*aṁ *ph*arsareṁ na*kh*=*sh*aṁ ŋâ-lya po-
3 (tstse) kar=tse ‖ putanakeçi 1 karuṇasāri 1 bhallāta*kh*a 1 [pi-]
4 (ppā)ḷ 1 nilutpāḷ 1 māḍha*kh* 1 tṛppāḷ 1 ŋetene
‖ tṛ

I. Index of Sanskrit Terms.

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? çarkŋāsa $2_{1.2}$
ça*skh*ath 40^{6}
çāṛ 14_{2} 34^{5}
-çi-ṣṣa 20^{6}
çeriye 40^{4}
çeçu 13^{5}
-çke 33_{1} 42^{6}, -çkeṁ 33_{3} See ṣke, ske.
* çkŋaçko 14_{1} 19^{5} 19_{2} 21_{3} 27^{2} 28^{4} 28_{3} 32^{6} 39^{3} 40^{4}, çŋaçko 7_{3}
çkŋārat-ske-tsi 35_{3}
çcireṁ 12_{3}
-çtro 21_{1}
çpālmeṁ 17_{3}
çle 40_{2} See ṣle.

ṣ

ṣaŋo 13^{6}
ṣamma 14_{6}
-ṣalle,-ṣallona,—ṣalya, see *ph*akṣalle, etc. Compare *sh*alle, *sh*allona, *sh*alya
ṣalype 4_{2} 6_{1} 10^{4} 13_{3} 16_{3} 17_{2} 18^{6} 19^{6} 19_{3} 19_{4} 21_{2} 22^{4} 22_{1} 24^{3} 26_{2} (*bis*) 27^{3} 27_{3} 27_{5} 28^{6} 29^{6} 30_{4} 31_{2} 33^{5} 33_{3} 34^{4} 34^{5} 35^{5} (*bis*) 35_{1} (inv.) 35_{4} (inv.) 37_{1} 39^{4} 40_{3}, salype 14^{5} 38_{1}
ṣā 17^{6}
ṣukkāṛă 10^{6}
ṣu*kh*dh 10^{6} 10_{1} 40_{1}
ṣeme 19^{6} 26^{3} (inv.) 34^{4}, ṣeme-yär*th* $3_{3\cdot4}$ 17_{1} 19^{6} 19_{3} 31^{6} 38, 38_{4}, ṣeme-yar*th* $15^{4.5}$ 20_{4} 29_{4} 31_{2} 32_{3} 37_{5} 41^{5}
ṣesā*th* 2_{4} 7^{6} 7_{4} 8_{1} 8_{3} 12^{4} (inv.) 21_{4}, ṣesā*th*a 36^{3} 38^{4}
ṣe-ske 2^{5} 39^{6}
ṣkara 2_{1}
ṣkaska 35_{3}
ṣke 22_{5} See çke, ske.
ṣŋarāpksa 13_{3}
ṣṭalla-*sh*a-lle 2_{2} 7_{1} 8^{3}
ṣpakaiṁ 3^{3} 8_{1} 8_{4} 9^{3} $9_{2.3}$ 10^{4} 21_{2} 34_{2} 37^{6} (inv.) 39_{1} (inv.) 42_{1}, ṣpakiye 8^{4} 9_{3} 31^{6}_{1}, ṣpakīye 15_{2} 15_{3}

*-ṣpati 2_3
-ṣle, see triṇäṣle and çle
-ṣlona, see yamaṣlona.
-ṣṣa 12^5 20^6 26_1 32^5 See ŋraçkaiṣṣa, yeretsaṣṣa, rimmā*kh*aṣṣa, saccaṣṣa.
-ṣṣana, 9^3 See arirā*kh*aṣṣana, açcaṣṣana.
-ṣṣana-n*th*a, see arirā*kh*aṣṣanan*th*a.
-ṣṣi, see kurka*th*aṣṣi.
-ṣṣe 10^5 32_2 (inv.) See kuñcīdhaṣṣe, cŋāckaṣṣe, tanāṣṣe tara*th*aṣṣe, mitaṣṣe, modhaṣṣe, lontāṣṣe, sŋeseṣṣe.
-ṣṣe-ñca, see lutaṣṣeñca.
-ṣṣai, see traiŋoṣṣai.

sh

-*sh*aṁ, -*shsh*aṁ, see alā*shsh*aṁ, na*kh*sha*ṁ*, muska*shsh*aṁ, yama*sh*aṁ or yama*shsh*aṁ, luta*sh*aṁ or luta*shsh*aṁ, sā*kh*a*shsh*aṁ.
-*sh*alona, -*shsh*alona -*sh*allona, *shsh*allona, see makŋa*shsh*allona, mluta*sh*allona, yama*sh*alona or yama*shsh*allona.
-*sh*alya, -*sh*allya, see trīŋä*sh*allya, *phakhsh*alya, su*thash*alya.
-*sh*alle, -*shsh*alle, see trīŋä*shsh*alle, yama*sh*alle or yama*shsh*alle, çat*thashsh*alle, ṣtalla*sh*alle, *shph*arka-*shsh*alle, etc., su*thashsh*alle.
*sh*ekse 34_1 (inv.)
*shph*a 17_1 29_1, *shph*a-taṁ 17_2
*shph*arka 12^4, *shph*arka-*shsh*a-lle 2^5 7^5 22_4 39_3, *shph*ärka-*shsh*a-lle $37_{1.2}$, *shph*ärkka-*shsh*a-lle 14^5, *shph*-arkka-*shsh*a-lle 10^6 $10_{1.2}$, *shph*-arka-*sh*a-lle 33^5 37^5, *shph*arkka-*sh*a-ḷle 10^4 10_1

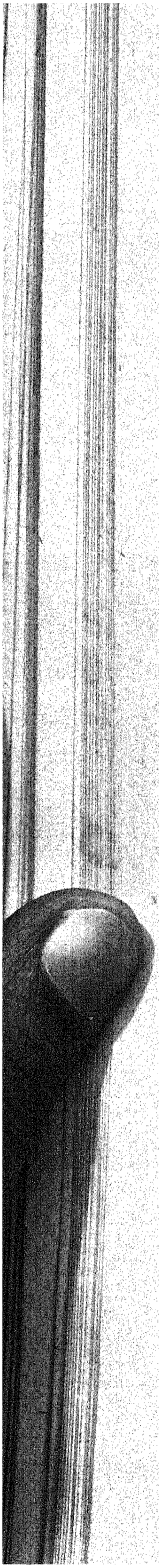
s

sa 4^5 4_2 4_3 5^1 5_1 5_4 6_1 6_2 6_5 7^6 7_4 7_5 9^3 9_2 10^4 10_1 13^4 14_1 (*bis*) 14_2 14_5 15_2 17^5 17_2 19_1 19_4 21_2 22^6 23^6 24^6 (inv.) 25_2 27^3 27_1 27_3 27_5 29^6 30^2 31_2 32^2 33^5 33_3 34^4 34^5 34_1 (inv.) 34_2 34_2 (inv.) 34^5 35^5 36_1 (inv.) 37^5 37_1 37_2 (*bis*) 38_2 39^4 39_1 (*bis*) 39_4 41_1
*sakāpce 3^5 3_1 18^5 32^6 35^6
sakna 2_2
sacca-ṣṣa 14^4
sata 3_6 (inv.)
sanāpa-tsi 4_3 14^2 29_1 34^5, sanāpa-lle 27_1 35^6 39^4 41_2, sanāpa-lle-nta 18^4
salype, see ṣalype.
sā 8^4 9_3 9_4 15_3 31^6 38_5 39_1
sā*kh*a-*shsh*aṁ 3^4 36^6 42_2
sātke 18^6 31_5 36^4 37^4, sātke-nta 7_5 15_2 21_5 29_4, satke-nta 2_5 (inv.) 9_1 11^2 13^3 15^5 (*bis*) 22_4 24^2 31^3 32_3 34^3 37^2 40^4 42_1, saṁtke-nta 21_1 38_1 39^6 42^4, saṁtke-nta-mpa 32_4
sāpādh 35_1
sāṛḷ 42^5
su*th*a-*shsh*a-lle 13^6, su*th*a-*sh*a-lya 42_1
*suh*i* 15^4
sūkara 7_6 (inv.)
sūdha 5^5
se 2^5 12^5 13^5 15^6 17_3 19_4 21_2 26_2 34^5 35_4 (inv.) 40_3
seka 17^6 35_4
se*kh* 13^4
se-ttse 31_1
selaiko 10_2 10_5 11^5 11_4 23^5 23^6 37^5
sono 40_3, sono*ph*a-lya 4^4 $14_{1.2}$ 21_3 30_4 30_5 33_3, sono*ph*a-lle 7_5 26_3 40_2
-ske 2^5 30^6 35_3 39^6, -skeṁ 4_3. See çke, ṣke.
skŋaṛ 42^5
skrena-tse 32_3 32_4
sŋese-ṣṣe 35_3
stsi 17_2
snni*y*er $27_{2.5}$

snailyokai 12_2
smāṁ 3^4 22_2
smāḍha 33^2
*smāyamu 13_1
syālña 3_4
syā-lle 5_2
sra-lle 42^5
slaŋ*kha*-llona 42^4, slaŋ*kl*a-lya 42_1

III. Index of Numerals.

one $1_{1.2.3.4.5}$ 2^4 $2_{3.4}$ $3^{3.5.6}$ $3_{1.2.3}$ *et passim*
two 1_1 $28^{3.4}$
three 20^4 24_2 25_3 32^3



SUPPLEMENT TO PART I.

Page vii of Introduction.

Add to List of Contributions:—

(22) From Mr. G. Macartney (M. 10), a collection of miscellaneous antiquities from Khotan, comprising (*a*) four (fabricated) block-prints; (*b*) several manuscript sheets in Brāhmī, Uigur and Persian characters; (*c*) 26 small terracotta figures; (*d*) 30 coins; (*e*) 11 seals, and (*f*) 12 miscellaneous objects. This collection was received by me in November 1899 in Oxford.

Page xxiv of Introduction.

Also add to Summary:—

31	M. 10	Books, Antiques	Khotan	(November) 1899	From Kāshghar.

Section I.—COINS AND SEALS.

Page 1. Consequent on the contribution above referred to, the Summary should be amended as follows:—

I.	Indo-Chinese ...	...	Coins,	97
II.	Chinese	...	,,	148
III.	Scytho-Bactrian ...	...	,,	36
IV.	Indo-Scythian ...	...	,,	12
V.	Sassanian ...	...	,,	7
VI.	Mediæval Hindu ...	...	,,	8
VII.	Mediæval Muhammadan	...	,,	141
VIII.	Modern Turki ...	...	,,	18
IX.	Modern Indian ...	...	,,	62
X.	Modern European ...	...	,,	1
			Total Coins	530

The result of the addition to the Indo-Chinese coins is that there are now 10 large and 87 small coins. Among the latter are 23 of the first, 16 of the second, 4 of the third, and 7 of the fourth variety. Also the average weight (see pp. 2, 4, 11) of the large coins is 211·1 grains, and of the small ones 46·08 grs.

Page 10. With reference to the woodcut, I may add that the reverse legends Nos. I and II are found on coins of the first variety, No. III on those of the second, and Nos. IV and V on those of the third

and fourth varieties. No. III seems also to occur, very exceptionally, on coins of the first variety.

It seems possible that the coins of the fourth variety which weigh only from about 13 to 40 grains, may really belong to a lower denomination of four *chu*, the normal weight of which would be 32·48 grains. The total weight of the seven coins of that variety is 189 grains, which gives the average of 27 grains. This, considering that three of the coins are mutilated, would very closely agree with the normal weight of 32·48 grains.

Dr. Stephen W. Bushell who has examined the Indo-Chinese coins of the Collection, has very kindly supplied me with the following corrective note:—

"The Chinese legend on the large coins is *chung* (1) *nien* (2) *ssŭ* (3) *chu* (4) *lü* (5) *ch'ien* (6), *i.e.*, Engraved (5) money (6) weighing (1) twenty (2) four (3) *chu* (4).

"*Nien*, twenty, is the colloquial modern reading of the second character,[1] the classical reading being *yu* with the same signification. The fifth character is obsolete, being now written with a different phonetic. The old form frequently occurs in ancient bronze inscriptions anterior to the Christian era. It is found in K'ang-hsi's Dictionary, but omitted in Giles' and Williams' Chinese Dictionary, although included in the "Dictionarium Linguae Sinicae Latinum" published by the R. C. Missionaries at Ho Kien Fu in 1877. Coins have never been struck in China proper, all "cash" being cast in moulds, so that I would suggest that it be derived in this connection from the carving of the die. I have never met with *t'ung* (copper) written in this way, and am inclined to think that the resemblance is only superficial.

"Twenty-four *chu* is the equivalent of the Chinese ounce (*liang*), so that the large coins in the collection would each represent four of the small coins, which are all inscribed, as described in your paper, *liu chu ch'ien*, *i.e.*, "money of six *chu*."

"The symbol in the middle of the large coins [shown on p. 4] does not seem to me to be *pei* (cowry, valuable). Is it not rather intended for a laurel wreath? A similar symbol occurs in one of Dutreuil de Rhins coins in the centre of a legend in Kharoṣṭhī script (see *Mission scientifique dans la Haute Asie*, III[e] Partie, archéologie, pp. 129–132, fig. 5).

"The symbol  in the middle of the Chinese script in the small coins of the third (camel) variety [see No. IV in woodcut on page 10[2]

[1] In the woodcut this character is shown upside down.

[2] The legend is not complete. One of the two component parts of the second character is omitted, from the coin, apparently for want of space. The symbol in question separates character 3 from character 2.

has some resemblance to what Sir A. Cunningham calls the "Ephthalitic Symbol (Num. Chron., 1894), but this may perhaps only be accidental.

"You have noticed the difference in style of the pencilling of the character *liu*, 'six.' I may add that the style of the other characters on the same coins varies accordingly. The style of the writing on this variety strikes me as older than that of the rest of the small coins (with the horse) [*i.e.*, Nos. I, II, III in the woodcut on p. 10]. The Chinese inscription in the small coins of the first variety takes two distinct types [Nos. I and II in the woodcut], of which No. II is the more archaic. But after all, a more archaic style does not certainly indicate a more ancient coin, as it may depend on the individual fancy of the engraver of the die. These engravers must, I think, have been Chinese, as the inscriptions are so well pencilled, with the exception of those on the coins of the fourth variety which are markedly degraded in style as well as in size.

"The earliest pieces of the series appear to me to date from the earlier Han rather than the later, judging only from the style of the lettering, and I would observe that the Chinese had conquered, and appointed viceroys over, Eastern Turkestan during the former Han, until the usurpation of Wang Mang, after which, for a period of 65 years, there was independence, or rather re-subjugation by the Hiung-nu Turks, ending in a second submission of Khotan and the other cities to the Chinese dominion."

Pages 18–22. Dr. Bushell has kindly supplied also the following note on the Chinese coins.

(*a*) *Ancient Coins.*

"(1) Coins without legends. Specimens like these are frequently dug up in China, mixed with others of similar type inscribed *pan liang* and *wu chu*, referred to the Han dynasties, especially to the former or Western Han. In the beginning of this dynasty private mintage was allowed, and the coinage became utterly debased, the inscriptions disappeared, and the pieces became thinner and thinner, till they were currently known as "thread cash." There was more intercourse with Khotan at this period than would be gathered from Remusat's "Histoire de la Ville de Khotan."

(2*b*) One of these specimens is correctly attributed to Wang Mang, but is not the other inscribed *wu chu?*

(2*c*) Seems to me the most archaic piece in the series. The symbol [3] reminds one of the undeciphered symbol on the small Indo-Chinese

[3] On the right of the coin as shown in the Plate II, No. 3, where however, it appears to be placed upside down. The symbol *chin* stands on the left, and is the first element in the character 3 of the legends shown in the woodcut on page 10.

coins [of the third variety, No. IV in the woodcut on p. 10], and the one opposite, reading round the field, appears to be *chin.* There are apparently two intervening symbols, very indistinct. Is the metal nickel? The style of the lettering is that of the Ch'in (Ts'in) dynasty, which preceded the Han in China (cf. B.M. Catalogue, No. 154, p. 326).

(*b*) *Mediæval Coins.*

(1*a*) Note a crescentic line in relief above the square hole on the reverse, which marks a variety. The Chinese story goes that the emperor made a nail mark on the wax model when it was presented at this period.

(1*c*) The number of Ta-li coins is remarkable, as it is rare in China. Only two sizes are figured by Chinese numismatists, so that the small specimen in the collection would be a clipped piece.

(1*e*) Plate II, No. 16. For *t'i* read *tê.* The period King-tê=A.D. 1004–1007. The period Che-tao of the preceding reign of T'ai-Tsung (1*d*) corresponded to A.D. 995–997. Many of the dates in the paper are incorrect, *e.g.*, Kien-yuan should be 758–759, and Ta-li 766–779. There is a convenient table for reference in Mayer's "Chinese Reader's Manual."

(1*f*) Plate II, No. 18. This has the inscription *Huang sung t'ung pao* and belongs to the Pao-yuan period (A.D. 1038–39). The coinage was inscribed Huang-sung "Imperial Sung" during this *nien-hao* to avoid the repetition of the characters on the "cash."

N.B.—The Chinese Annals of the Sung Dynasty record the large sum of "cash" given by the Emperor to the envoys from Khotan in return for the presents they brought to court; *e.g.*, 5000 strings of cash (=500000 pieces) in the 8th year of the Kia-yu period (A.D. 1063). Cf. Remusat's Khotan, p. 92. Also 100000 cash in the 8th year (A.D. 1085) of the Yuan-feng period, of which there are specimens in the collection (1*i*).

(1*n*) Plate II, No. 10 was issued in the reign of the last sovereign but one of the Hsi Hsia Dynasty of Tangut (A.D. 1212–22) and is figured (No. 11, p. 19) in my article in the Journal of the China Branch of the Royal Asiatic Society, Vol. XXX (1895–96). Hillier's spelling of *Hear* to give the Italian sound of the *a* is grotesque.

(1*h*) The first character of the legend is Hsien, and the coin was issued in the Hsien-p'ing period (A.D. 998–1003) of the reign of the emperor Chên Tsung. (Hillier's No. 125).

(1*o*) Plate III, No. 6 is a modern coin from Annam, belonging to the reign of their King Hien-tong (A.D. 1740–1786). See "Annam and its minor Currency" by Ed. Toda (Journal, N. Ch. Br. R.A.S., New Series, Vol. VII, 1882).

(1*p*) One of these three coins has the legend *Huang sung tu'ng pao* and was issued in the Pao-yuan period, like (1*f*). Another has the egend *Hsiang yu t'ung pao*, issued in period Ta-chung-hsiang-yu (A.D. 1008–1016) of the reign of Chên Tsung. (Hillier's No. 127) A duplicate is Plate II, No. 11.

(2) page 21. Plate II, No. 19 was issued by the Chinese General Wu San-kuei in the province of Yunnan, about the year 1670. The character on the reverse is *li* [inverted in the Plate], indicating the value of the piece. (Bushell, No. 239).[4]

(*c*) *Modern Coins.*

(1*a*) Obv., *K'ang hi t'ung pao* (A.D. 1662–1722). Rev., in Manchu,
(No. 1) *pao tsiowan*, from the mint of Board of Revenue, Peking (Wylie No. 70).[5]
(No. 2) *pao yuwan*, from the mint of Board of Works, Peking (Wylie, No. 71).

(1*b*) Obv., *K'ien lung t'ung pao* (A.D. 1736–1795). Of his reign there are coins of the following varities:—

Var. 1, six pieces.

(No. 1) Rev., *Pao tsiowan*, Board of Revenue mint (Wylie, No. 115).
(No. 2) Rev., *Pao chuwan*, Province of Ssŭch'uan mint (do., No. 124).
(Nos. 3–6) Rev., *Pao k'iyan*, Prov. of Kueichou mint (do., No. 121, cf. Bushell, No. 30, *note*).

Var. 2, four pieces.

(No. 1) Rev., *Pao yuwan*, Board of Works mint (Wylie, No. 116).
(No. 2) Rev., *Pao k'iyan*, Prov. of Kueichou mint (do., No. 121).
(No. 3) Rev., *Pao t'ai*, Taiwan (Formosa) mint (Bushell, No. 17).
(No. 4) Rev., Manchu *Ushi*, Turki *Ush*, mint of Ush in Eastern Turkestan (Bushell, No. 20).

Var. 3, three pieces.

(No. 1) Rev., *Pao tsiowan*, Board of Revenue mint Peking (Wylie, No. 115).

[4] Bushell *Coins of the Present Dynasty of China*, in Journal, N. Ch. Br. R.A.S. 1880.

[5] Wylie, Coins of the Ta Tsing Dynasty; Shanghai Literary and Scientific Society (Journ., Ch. Br. R.A.S.), 1858.

(No. 2) Rev., *Pao che*, Prov. of Chekiang mint (do., No. 118).

(No. 3) Rev., *Pao ch'ih*, Prov. of Ch'ihli mint (do., No. 129).

Var. 4, one piece.

Rev., *Pao i*, Ili mint (Wylie, No. 132, Bushell, No. 18).

(1*c*) Obv., *Hsien fêng chung pao* (A.D. 1851–1861).

(No. 1) Rev., Chinese *Tang shih*, "value 10"; Manchu *Pao ti*, mint of Tihuachou (Urumtsi) in Kansu province. (Bushell, No. 131).

(No. 2) Plate III, 5. Rev., Chinese *Tang wu shih*, "value 50"; Manchu *Pao i*, Ili mint. (Bushell, No. 163).

(No. 3) Plate II, 30. Obv., *Hsien fêng yuan pao.* Rev., Chinese *Tang pai*, "value 100"; Manchu *yetkiyang*, Turki *Yārkand.* (Bushell, No. 171).

(2) Page 22. Plate II, No. 23 is figured by Bushell, Journal, China Branch Royal Asiatic Society, 1899.

(3) Page 22. Plate II, No. 25 are not coins, but chessmen; *viz.*, *Shih* (not *tsien*), "chancellor"; *Pao* "cannon"; *Ping* "soldier."

Page 33. With reference to the coins, enumerated under No. (5), the specimen figured in Plate I, No. 23, has been identified by Mr. E. Rapson as a Kashmir coin.

Page 35. With reference to the coins, described under (*b*) Aṭāliq of Kāshghar, I may note that coins of this kind have been described by Blochmann, in the *Proceedings* of the Asiatic Society of Bengal, for 1876, page 90. According to Blochmann, "the name 'Abdul 'Azīz Khān, Sultan of Turkey, is given on the coins, because the Aṭāliq of Kāshghar does not feel strong enough to strike coins in his own name."

XI. Seals, Intaglios, etc.

Page 37. Consequent on the contribution, M. 10, already referred to, the number of these objects is now 77. The additions are

No. 82. Square flat brass seal, with broken perforated peg, showing two birds facing each other under a tree; very similar to No. 64.

No. 83. Round intaglio of blackish agate with whitish surface on the engraved side (cf. No. 45), showing a lion crouching to right, behind (or transfixed by) a cross-shaped stake.

No. 84. Round intaglio, of a mineral like No. 83, showing a deer running to right, above it a pursuing dog.

No. 85. Rhombus-shaped intaglio, of red cornelian, showing a lion crouching to right.

No. 86. Elliptical intaglio, of an uncertain mineral, showing a lion walking to right.

No. 87. Round intaglio, of an uncertain mineral, showing two men, walking to right, one behind the other, right arms uplifted, left hanging down. Similar to No. 35.

No. 88. Round intaglio, of an uncertain mineral, showing a fish ?

No. 89. Rhombus-shaped intaglio, showing a twig.

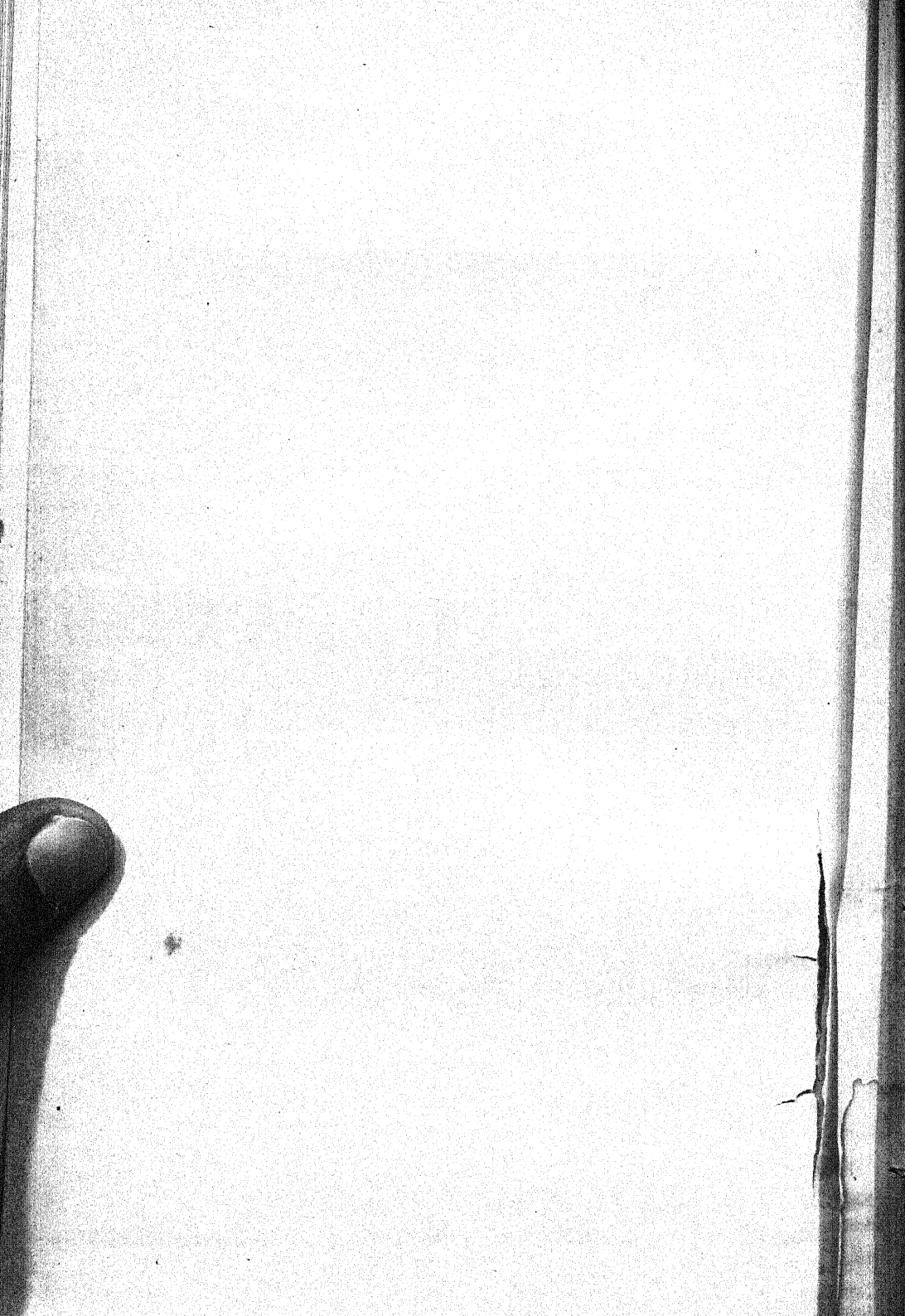
No. 90. Square amulet, $\frac{5}{8}$ inches, made of horn, thickness $\frac{1}{4}''$, perforated for string-hole, engraved with two different linear designs.

No. 91. Square-based pyramidal, perforated seal-ring or amulet, of white stone, engraved with a linear design very similar to that of No. 76

Nos. 92 and 93. Indistinguishable.

ERRATA IN PART I.

Page	30, line 22,	read	لا إله إلا	for	لا إلاه إلا	
,,	33, ,, 6,					
,,	34, ,, 3,					
,,	37, ,, 13,	,,	XI	,,	X	
,,	39, ,, 3,	,,	almond	,,	lozenge	
,,	41, ,, 19,	,,	right	,,	left	
,,	110, ,, 35,	,,	wider	,,	narrower	
,,	110, ,, 36,	,,	narrower	,,	longer	
,,	29, ,, 24, and elsewhere	,,	H.	,,	Ḥ	



SKETCH

OF

LADAKHI GRAMMAR

IN CO-OPERATION WITH OTHER MORAVIAN MISSIONARIES

COMPILED BY

A. H. FRANCKE,

MORAVIAN MISSIONARY.

[*Published as Extra No. 2 to the Journal of the Asiatic Society of Bengal, Vol. LXX, Part I, 1901.*]

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PREFACE.

IN offering a Sketch of Ladakhi Grammar to the public, I wish to draw attention to the fact, that a thorough study of the Ladakhi Tibetan dialect pre-supposes a certain amount of knowledge of the classical Tibetan language. I could not well be expected to embody a classical Tibetan grammar in a pamphlet entitled 'Ladakhi Grammar,' and therefore advise every earnest student of Ladakhi Grammar to previously study grammars of the classical language.

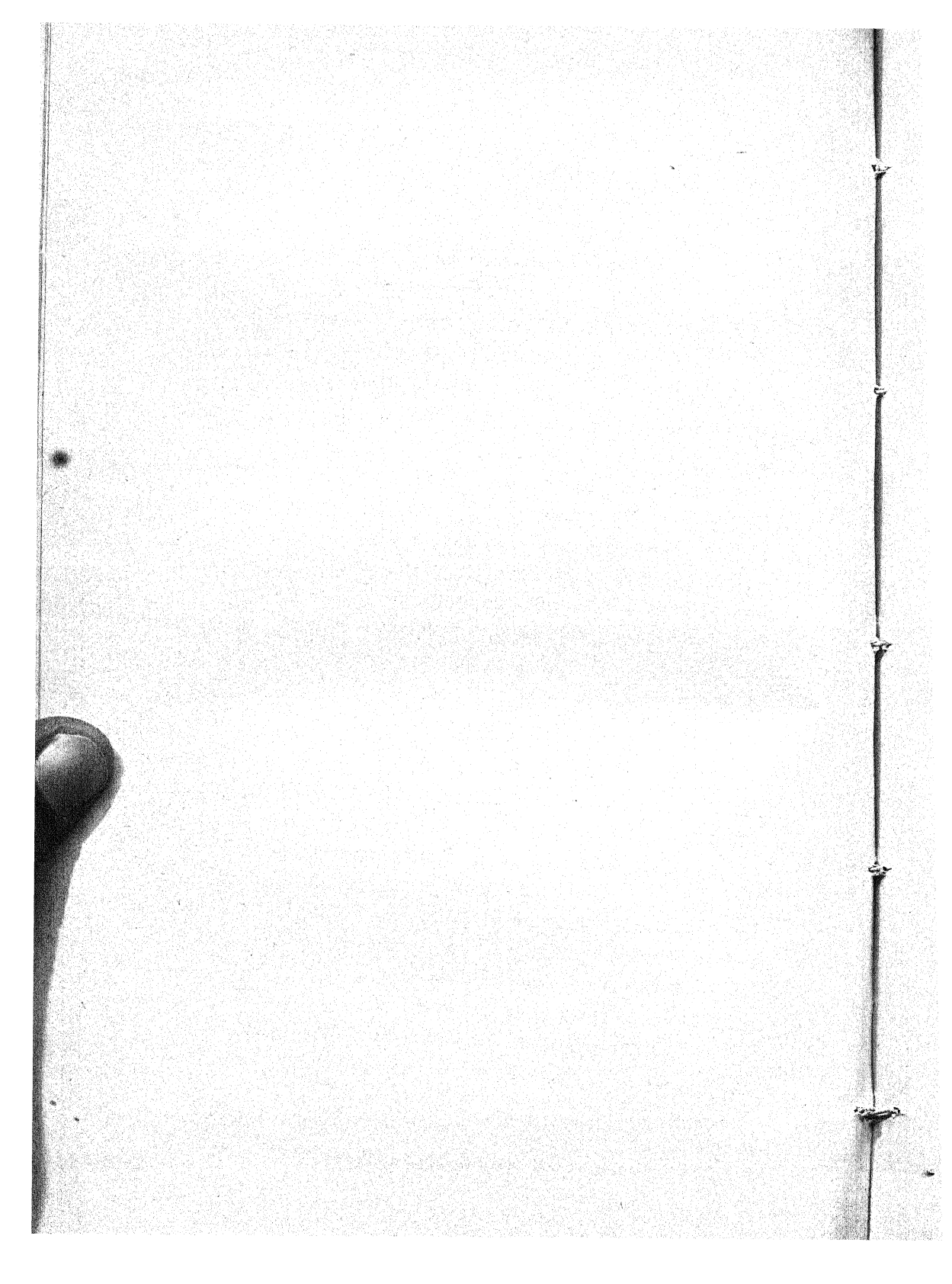
I wish to express my sincerest thanks to all those who have assisted me in bringing about the publication of this pamphlet: to the Indian Government, for liberally supplying the necessary means; to G. A. Grierson, Esq., C.I.E., Ph.D., I.C.S., for all the care taken in revising the grammar and correcting its terminology; to Professor Dr. Conrady, of Leipzig, for all his most useful suggestions rendered, when revising the first German Manuscript of the grammar [Professor Dr. Conrady's excellent work 'Eine Indochinesische Causativ-Denominativbildung' has proved invaluable for the discovery of many grammatical rules]; to all my direct co-operators (Reverend A. W. Heyde, Ghum; Reverend S. Ribbach, and Dr. E. F. Shawe, Leh), whose assistance was very great, and without whose co-operation the book would not have reached its present level.

A. H. FRANCKE.



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INTRODUCTION.

Remarks concerning the pronunciation of the Ladakhi Dialect.

System of Romanizing.—To facilitate the printing no accentuated letters are used. All accents given in this book refer only to the stress.

Consonants: A few remarks will suffice.—*Sh* = *sh* in English; *zh* = French *j*; *j* = *j* in English; *c* = *c* in Italian, when preceding *i* or *e*, that is = *tsh*; *ch* being the aspiration of *c*, is pronounced more forcibly; *ts* = *ts*; *ths* being the aspiration of *ts* is pronounced more forcibly.

Vowels: They correspond exactly to the Italian ones. They are long if the stem ends in a vowel; short in all other cases.

Tenuis, Tenuis aspirata and Media.

The Ladakhi mediæ, that is, *g*, *d*, *b*, *dz* and *j*, are, generally speaking, not different from the English equivalents.

As finals, the mediæ *g*, *d* and *b* are sounded rather like *k*, *t*, *p*, for which reason in several dictionaries they have been written as such. I have not done this, because before all case endings they re-assume their medial nature. Thus *mig* is sounded *mik*, but in *miggi*, *miggis*, *migga* (for *migla*) the *g* sound is quite plain.

The Ladakhi Tenues Aspiratæ, that is, *kh*, *th*, *ph*, *ths* and *ch*, exactly correspond to the English non-aspirated tenues, that is, to *k*, *t*, *p*, *ts* and *ch*.

The greatest difficulty of Ladakhi pronunciation rests with the unaspirated tenues, that is, with *k*, *t*, *p*, *ts* and *c*.

The normal pronunciation of the same holds the mean between English media and tenuis; but the tenuis is always inclined to be pronounced like a media, if it is not furnished with a protecting letter.

Protecting letters are—

(1) All prefixed and superadded letters of Tibetan orthography, whether they be pronounced or not. In this grammar only the actually pronounced ones are written, but it must be borne in mind, that *ka*, word, has the protection of a silent *b*, *tangces* that of a silent *b*, *tong* that of a silent *g*, etc. Thus, for instance, the following words show the normal pronunciation of the tenuis: *skampo*, dry; *ka*, word; *skarma*, star; *stanpo*, firm; *skan*, gum; *sta*, horse, etc.

(2) A following *y* protects the preceding tenuis. Thus we have the normal pronunciation in *kye*, oh; *kyir*, round; *kyongpo*, hard. In *kyirmo*, Rupee, the *y* was lost and the pronunciation became *girmo*.

(3) Letters forming a syllable, in a few cases protect the following tenuis: thus the pronunciation of the *t* in *ngatang*, we, and *ngati*, our, is normal.

Examples for unprotected tenuis = media, *kun* = *gun*, all; *kushu* = *gushu*, apple; *kakha* = *gakha*, alphabet; *kabsha* = *gabsha*, shoe; *karskyin* = *garskyin*, loan; *kophongs* = *gophongs*, guitar; *koba* = *goa*, leather; *kram* = *dram*, cabbage; *krongkrong* = *drongdrong* upright; *trangka* = *drangka*, a coin; *tagir* = *daggi*, bread; *tramnag* = *dramnag*, gout; *pagbu* = *bagbu*, brick; *pila* =

bila, cat; *pungpa* = *bungpa*, vessel of clay; *kabza* = *gabza*, handle.

Without a protection the normal pronunciation is retained—

(*a*) with *ts* and *c*;

(*b*) with all non-Tibetan words, as *kadar*, care; *tubag*, gun; *turuka*, Turk, etc.;

(*c*) with dialectical words, the orthography of which was laid down only recently. We do not know which, now silent, letters might be hidden in them; such are *kamakume*, rheumatism; *karkor*, a dell, etc.;

(*d*) with the causatives of the type *kh* = *k*. Thus, for instance, *tonces*, causative of *thonces*, shows the normal pronunciation of the *t*. This fact gives rise to the supposition, that in these causatives a silent *s* might be hidden. If this theory is right, these causatives would not be irregular but belong to the regular type *kh* = *sk*.

Pronunciation of R.

The normal pronunciation of *r* agrees with that of Hindostani *r* [ر].

The pronunciation of *r*, preceding or following a consonant, is slightly different.

R, when preceding a consonant, is pronounced rather like the German or French guttural *r*. This *r* when placed before *g* or *k* (but not before *gy* or *ky*), generally associates with these letters to form the new sound *ch*, to be pronounced like *ch* in *loch*, a Scottish lake.

R, when following a consonant, is pronounced rather like the English *r*, only softer. Beginners generally have some difficulty in hearing it at all.

I do not think it right to speak of linguals in this case, because *r*, following labials or gutturals, is not differentiated from *r*, following a dental. Thus in *drug*, six, and in *kabra*, a herb, the *r* is the same.

Pronunciation of R and W.

The normal pronunciation of *b* is not different from that of English. When placed between two vowels or after *ng*, *r* and *l*, *b* is pronounced like the English *v*. In this book *v* will always be written in this case. The pronunciation of *w* is nearly the same as that of the English *w*.

Prefixed letters.

Though many are silent, some are sounded in Ladakhi. Prefixed *b*, *d*, *g* are often pronounced as *r* and *s*. Examples: *bdemo* = *rdemo*, nice; *dgosces* = *rgoshes*, to must; *gtam* = *stam*, speech. Prefixed *r* often becomes *s*, and *s* becomes *r*; both can become *sh*. Examples: *rtags* = *stags*, a present; *sgam* = *rgam*, box; *rkang-gling* = *shkangling*, flute. All prefixed letters before *l* become *h*. Examples: *gla* = *hla*, wages; *slebces* = *hlebces*, to arrive; *glu* = *hlu*, song. The orthography of this book is in accordance with the actual pronunciation.

Consonants before r and y.

Br and *gr* become *dr*; *pr* and *kr* become *tr*; *phr* and *khr* become *thr*: *by* = *j*, *py* = *c*, *phy* = *ch*. In Lower Ladakh, these rules are not observed with labials. The orthography of this book is in accordance with the pronunciation of Leh.

Principal laws of sound.

(*1*) *s* + *c* = *sh*.

Examples: *nyiscu* = *nyishu*, twenty.

All verbs, the stems of which end in *s*, associate this *s* with the *c* of *ces* to form the ending *shes*.

In the imperative ending *shig* the *s* of the imperative stem is contained, and the suffix *cig*.

If the adjective suffix *can*, having, is added to a stem ending in *s*, *shan* is attained.

(*2*) *s*, *muta*, *and r* = *shr*.

Mutæ are *g*, *k*, *d*, *t*, *b* and *p*. Examples: *sgrungs* = *shrungs*, tale; *sdreces* = *shreces*, mix; *sgrulces* = *shrulces*, exercise; *sprin* = *shrin*, cloud; *skra* = *shra*, hair.

(*3*) *muta and r* = *r*.

Examples: *sgrungs* = *rungs*, tale; *brangngu* = *rangngu*, fly; *agrigpa* = *rigces*, make ready; *dgra* = *ra*, enemy; *dpe-sgra* = *spe-ra*, speech; *grogs* = *rogs*, help; *snga-dro* = *snga-ro*, morning; *drug*, six = *rug*, in *curug*, sixteen, and *gorug*, ninety-six.

(*4*) *l as a final is often dropped.*

Examples: *slel* = *le*, name of the capital of Ladakh; *shel* = *she*, name of a village; *rgyalpo* = *rgyapo*, king; *gsolba* = *sova*, prayer; *skyelba* = *skyaces*, to transport.

(*5*) *stems ending in a vowel add n.*

Examples: *nyi ma* = *nyin*, sun, day; *che* = *chen mo*, great; *nyemo* = *nyen*, near, friend; *thsa-ba* = *thsan-te*, hot; *chung-ngu* = *chung-ngun*, small; *me-tog* = *men-tog*, flower.

(6) *tenuis aspirata between two vowels or within a word often becomes media.*

Examples: *spyinchu* = *pinzhu*, glue (instead of *pinju*; *j* often becomes *zh* in Ladakhi); *bu-chung* = *buzhung*, little boy; *gyuchung* = *yuzhung*, little turquoise; *akhu* = *agu*, husband; *aphyi* = *abi*, grandmother; *ache* = *aje*, elder sister.

(7) *the nasals often change.*

Examples: *dngul* = *mul*, silver; *khronpa* = *khrompa*, well; *rmilam* = *nyilam*, dream; *sngasbol* = *snyasbol*, pillow; *mchongba* = *chomces*, to jump.

Remark: The Rongpa dialect (upper-most Indus valley right bank) also has the following interesting law:—

r or *s* and *p* = *f*.

Examples: *yangspa* = *yafa*, fun (final *ng* is often dropped in Rong); *mgyogspa* = *gyog-fa*, quick; *cospayin* = *cofin*, made; *tangspayin* = *tafin*, gave.

r or *s* and *k* = *h*.

Examples: *skad* = *had*, voice; *skomces* = *homces*, be thirsty; *skampo* = *hampo*, dry; *rkangdung* = *hangdung*, trumpet.

A parallel *r* or *s* and *t* = English *th* is missing.

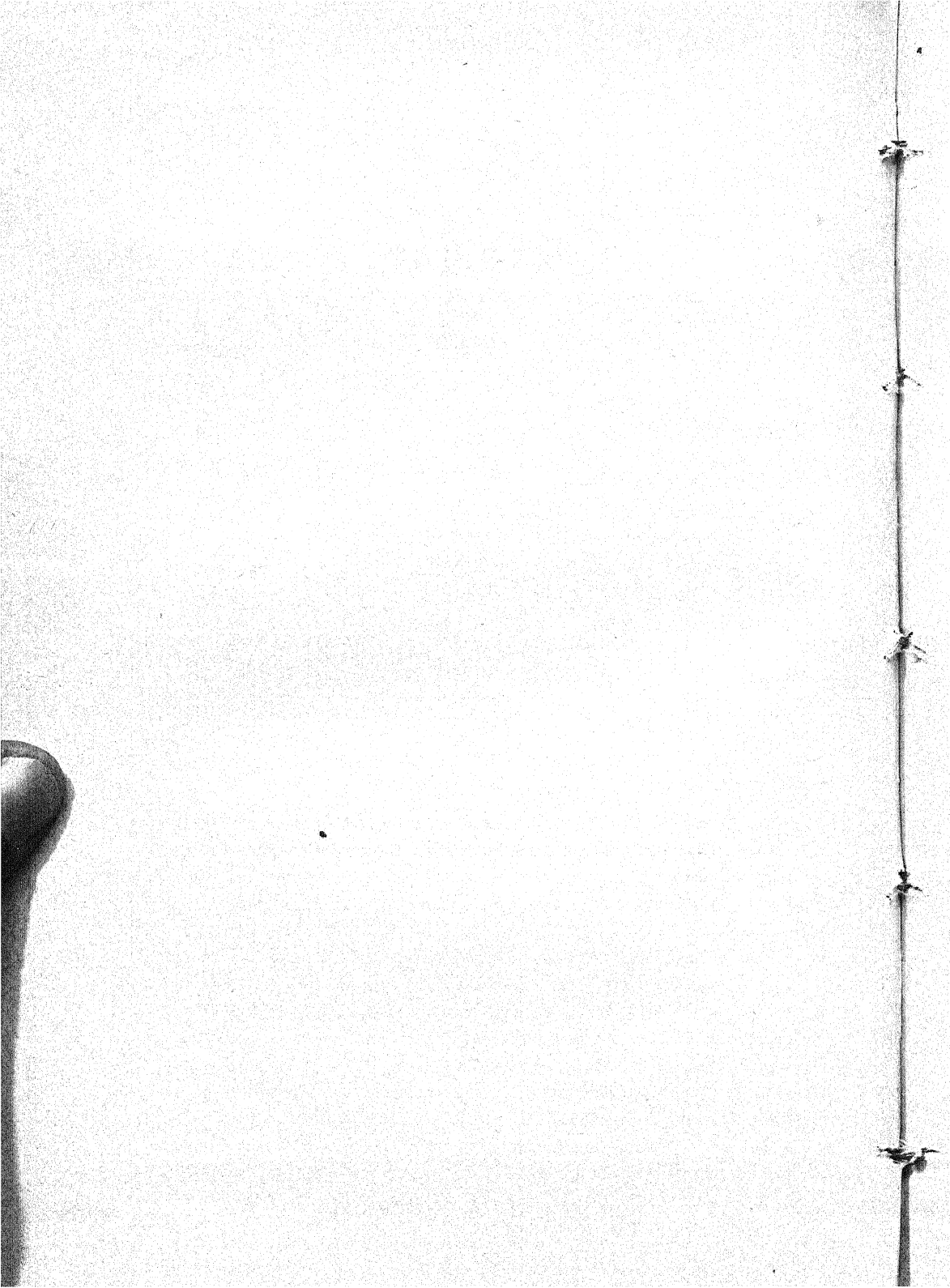
The Accentuation.

Principal rule: When a suffix or the article is joined to a mono-syllabic word, the stem has the stress. Examples: *mi'la*, to the man; *las'la*, at work; *thsang'ma*, all; *skam'po*, dry; *mig'gi*, of the eye.

Because the words which form a compound throw off their articles before being joined together, most of the compounds consist of only two syllables. In these the first syllable generally has the stress. Examples: *chu'mig*, well; *rkang'lag*, limb; *lag'shub*, glove; *'nyinlam*, day's march; *tang'rag*, thanks.

From the above it follows that the trochee is at the root of all Ladakhi poetic metre. Besides this the dactyl is also rather frequent; for, if a suffix is joined to a compound consisting of two syllables, a dactyl is obtained.

There exist a few dissyllabic words in Ladakh which have the stress on the second syllable; for instance: *khathog'*, above; *nyerang'*, you, respectfully; *oná*, yes (but the latter not in all cases).



GRAMMAR.

THE ARTICLE.

1. *Definite article.*—In Ladakhi the definite article has almost entirely lost its individuality. It has become an essential part of the word to which it is added. This fact is most plainly shown in the case of adjectives, most of which are quite unable to adapt their article to the gender of the substantive they belong to. Thus *chenmo*, great, invariably retains the feminine article *mo*, whilst *chugpo*, rich, retains the masculine article *po*.

The gender of the article agrees with that of the noun in the case of living beings. Thus the feminine articles *ma* and *mo* are met with in *senggemo*, lioness; *jamo*, hen; *khyimo*, bitch; *shema*, lady; whilst the masculine articles *po* and *bo*, *pa* and *ba*, are found in *rgyalpo*, king; *thapa*, Indian; *dagpo*, owner; *khyirapa*, hunter; *ladagspa*, Ladakhi.

NOTE.—The word *shamma*, man or woman of Sham, Lower Ladakh, retains the article *ma* for masculine and feminine. Here we may have a similar case of contraction as in *samma* for *sampar*, see Verb Supine. Probably the masculine form was *shampa* originally and contracted to *shamma*.

Compound words.—The definite articles, though they must necessarily be considered as forming an essential part of the word they are connected with, are dropped for one reason only, *viz.*, for forming compound words. Thus *rkangpa*, foot, and *lagpa*, hand, form the compound *rkanglag*, hand and foot.

The Ladakhi has two kinds of compounds:

a. Copulative compounds. In these the compound simply shows the result of adding the ideas of the two or more original words. Examples: *rkanglag*, hand and foot, or limb; *drangdro*, cold and warmth, or climate; *jashrag*, bird and wild fowl, or all birds.

b. Determinative compounds. In these one of the constituent parts (either the first or the second) is the attributive adjunct to the other. Examples: *buzhung*, the little boy; *chugthrug*, the rich child; *chumig*, the eye of water, the well; *shingsta*, the horse of wood, the carriage; *gurkarmarser*, the tents, which are white, red and yellow.

Remark.—If compounds are formed of words of two syllables, which have no article, the second syllable is dropped, as if it were an article. Examples: *sengthrng*, the lion's child (a name), formed of *sengge*, lion, and *thruggu*, child; *bartsi*, the cow-herd, formed from *balang*, cow, and *rtsivo*, shepherd.

2. *Optional article.*—From the definite article the optional article *bo* or *po* seems to have developed. It may be added to any word, whether it is already provided with the definite article or not. By adding the optional article the word is emphasized. Examples: *migpo*, the eye; *i shemabo*, this lady.

3. *Indefinite article.*—The numeral *cig*, one, assumes three forms, when used as indefinite article. *Cig* is used if the preceding word ends in *g*, *d*, or *b*; *shig* is used if it ends in *s*; and *zhig* in all other cases. Examples: *zhagcig*, a day; *lasshig*, a work; *nyungmazhig*, a turnip.

Cig, when placed after a collective or a plural, means some. Examples: *chuzhig*, some water; *phezhig*, some flour; *chumigzhizhig*, some four wells.

Instead of *cig*, *rig* is sometimes said, *e.g.*, *nyenrig in*, it is a friend.

In Lower Ladakh *ig* or *ik* is used as indefinite article, *e.g.*, *shaig*, some meat; *meig*, some fire, especially with stems ending in a vowel.

THE SUBSTANTIVE.

Declension.

The case endings are the following:—*Nominative* and *Accusative:* No ending, unless they take the optional article *bo*.

Genitive: i, with doubling of the last consonant of the stem, if it ends in such.

Instrumental: is, with doubling of the last consonant of the stem, if it ends in such. If the final is a vowel, only *s* is added. The Instrumental is also expressed by *dang*, *rgonas*, and similar postpositions.

Dative: la; often *a* is only pronounced.

Locative: na. This ending is very rarely used; instead of it we find *la*, or the postposition *nangna*, in, with the Genitive.

Ablative: nas. Instead of this *nangnas*, out of, and similar postpositions are often used.

Terminative: ru, du, su, very rarely used. Instead of these *la* or postpositions, for instance, *tsa*, near, are frequent.

Examples.

	las, work.	mi, man.
Nom.	*las*, or *lasbo*	*mi*, or *mibo*
Acc.	,, ,,	,, ,,
Gen.	*lassi*	*mii*
Instr.	*lassis*, or *lasdang*	*mis*, or *midang*
Dat.	*lasla*	*mila*
Loc.	*lassi nangna*, and *lasla*	*mii nangna* and *mila*
Ablat.	*las nas*, or *lassi nangnas*	*minas*, *mii nangnas*, or *mii chogsnas*
Term.	*lasla*	*mila*, or *mii tsa*.

Use of the Cases.

The Nominative.—This case takes no ending but the optional article.

The use of the nominative is more limited in Ladakhi than in most Aryan languages, because transitive verbs are construed with the instrumental. The nominative is used then:

1. For both subject and predicate in such sentences, the predicate of which is not a verb, and in which *yod*, *in*, *dug*, have, is, are; *chen*, to become; *song*, been, become, etc., serve as copula. Examples: *khangpa thonpo yod*, the house is high; *drongkyer dei nangna thsongpa mangpa dug*, in that town are many merchants.

2. As the grammatical subject of all intransitive verbs. Example: *chu draggi nangnas bing dug*, the water comes out of the rock.

Note.—Beginners must take care not to consider all active verbs as transitive; active intransitive verbs, such as go, run, etc., must be construed with the nominative. Example: *nga gyogspa drulte yongspin*, I came, running fast.

3. The verbs to have, to get, to need, to desire, take the nominative for the thing needed, desired, etc. Example: *ngala gonces shig yod*, *thobsong*, *rgoshes yod*, I have, have received, need a coat.

4. The nominative is used as vocative. Example: *kye tsovo*, O Lord! *wakun*, O you all!

The Accusative.—This case takes no ending but the optional article. It is used:

1. For the direct object as in the Aryan languages, but not so often, as the dative with *la* is often used instead of it. Examples: *bomo de thongspin*, I saw that woman; *khyis mila thams*, the dog bit the man.

2. The accusative stands with some postpositions. For instance, with *dang*, with; *thsogse*, like, etc. See under Postpositions. Examples: *dridang*, with the knife; *shangkhu thsogse*, like a wolf.

3. The accusative stands idiomatically in some absolute phrases of time and manner. Examples: *ngamo*, in the morning; *phidro*, in the evening; *nanning*, last year; *ruspa thonpo*, as regards birth [he is] high.

In many cases, however, the *la* of the dative may be added. Example: *ngamola yong*, come in the morning.

NOTE 1.—The optional article *bo*, though it is used for all cases is especially found with the nominative and the accusative. If *bo* is used with a case, which has an ending, it takes the ending itself. Example: *I mibos dezug zers*, this man said so.

Since *bo* emphasizes the word to which it is joined, it forms an equivalent for the classical particle *ni*, which generally appears as *ning* or *nig* in Ladakhi.

NOTE 2.—Use of *ni, ning, nig* in Ladakhi: The chief function of *ni*, etc., is that of distinguishing the subject from the predicate, if the predicate is not a verb. Example: *ri thonpo in*, is either 'it is a high hill' or 'the hill is high.' *Ri ning thonpo in*, can only mean 'the hill is high.' See *ni* also under Reduplication of the Verb and under Conjunctions.

The Genitive.—The genitive always stands before the word to which it relates. Example: *rgyalpoi khar*, the castle of the king; *dambai chos*, the holy religion.

As predicate the genitive sometimes stands by itself. Then the word to which it would belong as attribute is omitted. Example: *thsasbo sahibbi innog*, the garden is the Sahib's, instead of *thsasbo sahibbi nor innog*, the garden is the Sahib's property.

1. Although the subjective, objective, and partitive genitive may occur occasionally in Ladakhi, the genitive generally expresses a "possession." A quality may be considered as a possession, and therefore an adjective takes the genitive as soon as it is placed before its substantive. Example: *dambai chos*, the holy religion = the religion of holiness.

2. Most postpositions govern the genitive. Example: *amai phila*, for the mother; *chui nangna*, in the water; *mii dunla*, before the man. See Postpositions.

3. The *sang* of the comparative often governs the genitive. Example: *thsangmai sang thonpo*, higher than all.

NOTE 1.—*Ai* is generally pronounced like the German *ä* or *e*.

NOTE 2.—Stems ending in a vowel, especially those ending in *i* and *e*, very often form their genitive in *si*. Example: *Ishesi khangpa*, Ishe's house.

The Instrumental.—

1. In stems ending in a consonant, the *s* of the ending *is* is frequently combined with the *i* to a long *i*, so that the pronunciation of the instrumental is very much like that of the genitive. In stems ending in a vowel, the *s* is pronounced as *e* or *i*—thus *mangpos* = *mangpoe*. [In the dialects of some villages near Leh the *s* is distinctly heard, and in Leh itself this pronunciation is not considered "foreign."]

NOTE.—Stem sending in a vowel, especially those ending in *i* and *e*, very often form also their instrumental in *si*. Example: *memesi zers*, grandfather said.

2. Besides the instrumental with a case ending, the Ladakhi has one formed with *dang* or other postpositions. We must distinguish between the two:—

(*a*) the instrumental with a case ending is the case of the agent. In transitive sentences it takes the place of the nominative in English. Example: *ngas specha de silpen*, I have read that book.

NOTE.—Only in a few idioms is this instrumental not used instead of the nominative. Examples: *kho miggis dzinna midug*, he cannot see well with the eye; *ringgo khas khors*, the summits are covered with snow; *khas klobba zum*, learn it with the mouth (by heart).

(*b*) the instrumental with *dang*, etc., is used, if the person or thing performing an action makes use of further means for that purpose. Example: *rgyalpos mizhig raggi dang saddug*, the king kills a man with the sword. *Dang* is often strengthened by the addition of *nyampo*, together.

Other postpositions which imply an instrumental sense are: *rgonas* and *khanas*, through, with the genitive. Example: *mi dela mul mangpo las cocessi rgonas* [or *khanas*] *thob*,—that man got much money by working [doing work].

The Dative.—The dative is not so particularly the case of the indirect object as an intensified form for the direct object. The ending *la* is, in ordinary conversation, simply pronounced as a short *a*.

The dative is especially used to denote the possessor, etc., with the verbs to have, to receive, to need. Example: *ngala khangpa zhig, yodthob, rgos*, I have, have got, need a house.

In many cases the dative points out the sufferer in the indirect passive formation (see Verb, passive). Examples: *ngala yasha corug*, I am loved; *khyi des mi zhigla thamstog*, a man was bitten by the dog.

The dative answers, moreover, the questions, 'where?' and 'whereto?' and has consequently assumed the functions of the terminative and locative. Examples: *mi de lela charug*, the man goes to Leh; *ngai lagla berka zhig yod*, in my hand is a stick.

NOTE.—The word *lagpa*, hand, drops the article *pa* in the dative case.

The suffix *la*, when added to an infinitive, means 'for' or 'in order to.' Thus *cocesla*, in order to do it. (See Verb, supine).

The Locative.—Though people on the whole are not very discriminate in distinguishing this case from the terminative in *la*, still it must be borne in mind that the terminative especially denotes motion to a place, and the locative rest in a place.

The pure locative in *na* is practically not used in Ladakhi, but in its place either the dative or the locative postpotion *nangna* with the genitive. Example: *khangpai nangna cogtse zhig yod*, in the house is a table.

NOTE 1.—The postposition *nangna* is, moreover, used to represent the prepositions 'between' and 'among,' which really express a locative relation. Example: *nyiskai nangna khyad chenmo zhig yod*, there is a great difference between the two.

NOTE 2.—In some adverbs of place the locative ending *na* is used before the terminative ending *ru*, for instance *inaru*, here; *anaru*, *denaru*, there, also *inanas*, from here; *ananas*, from there, show the *na*.

The Ablative.—The pure ablative, formed by adding *nas* to the stem, is more frequently met with than the pure locative. The termination besides being used with pronouns (adverbs) and numerals, is also used with substantives. Examples: *ganas*, from what? *anas*, *denas*, from that, since; *inas*, from this, since; *cignas*, from a (or one); *zhingnas*, from the field.

In many cases, however, the ablative is expressed by the postpositions *nangnas*, out of; *dunnas*, from the presence (of persons); *chogsnas*, from the direction of; *khanas*, from above; *yognas*, from below, etc. Examples: *chui nangnas*, out of the water; *mii dunnas*, from the man; *tsangspoi chogsnas*, from the river.

The pure ablative in *nas* is used:

1. With the postposition *pharla*, for, during. Example: *lo mangponas pharla*, for many years.

NOTE.—The postposition *pharla* is used if the action or condition, expressed by the verb, is progressive over the period. If a definite period be meant, then *nonte* (*lonte*) or *songste* must be used. Thus *lo mangpo nonte*, many years since, if the action is not progressive.

2. Some verbs have their object in the pure ablative, for instance, *rgyalces*, to conquer, and *drices*, to ask (but both may also have the dative). Examples: *rgyalpo dravonas rgyalsong*, the king conquered the enemies; *mi des nganas driva zhig dris*, that man asked me a question.

3. Very frequently the pure ablative is used to denote the locality from which something issues. Thus *lenas*, from Leh; *ladagnas* from Ladakh; *khangpanas*, from the house; *namkhanas*, from the sky (heaven); *zhingnas* from the field.

4. To indicate the material of which a thing is made: *shingnas*, of wood; *sanas*, of earth; *lcagsnas*, of iron.

NOTE 1.—In some villages the ending *nas* is used instead of the *na* of the locative, especially in the case of adverbs and postpositions. Thus *nangnas* (instead of *nangna*), within; *gyabnas*, behind; *inas*, here; *anas*, there.

NOTE 2.—The ending *nas* is generally pronounced *nä*.

The Terminative.—This case denotes the aim of an action as well as the motion towards that aim or end.

The true terminative, ending in *ru*, *du*, etc., is almost entirely lost in Ladakhi. Instead of it, the dative has come to be used. In certain cases, however, postpositions are preferred. Thus for motion towards persons or being near them, *tsa*, near. Instead of *tsa* the adverb *deru*, there, is also occasionally used. Example: *abai tsa song* or *abaideru song*, go to the father.

The true terminative is found still:

1. With many pronouns, to form adverbs; thus *iru*, here; *aru*, there, thither; *deru*, there, thither; *zhanmaru*, to the other; *thsangmaru*, to all; *garu*, where, to which.

2. A substantive which always uses the pure terminative is *id*, mind. Example: *iddu borces*, keep in mind.

THE PLURAL.

The plural of Ladakhi has no ending or suffixes, but is indicated by words expressing the idea of multitude. The most frequently used of these words are the pronouns *thsangma*, *thsanka*, *kun*, *sag*, all; *mangpo*, many; *khacig*, several, some, besides all the numerals. All words denoting the plural must be placed after the word which they multiply, and

have the case endings added to them. Example: *bomo kunnis* (= *gunnis*) *gonces thrus*, the women washed clothes.

thsangma, all, frequently takes the pronoun *de*, those, between itself and the substantive, thus *mi de thsangma*, all those people.

Distinction between *thsangma*, *thsangka*, *kun*, all:—

thsangma and *thsangka* mean 'all' in a literal sense, if no person or thing is omitted. Example: *sipa de thsangma shor*, all the sepoys (every sepoy) ran away.

kun means 'all,' when a number of people is spoken of in a loose way. Example: *sipa kun shor*, the sepoys ran away (if possibly a few remained). *kun* is mostly used with living beings.

thsangka in particular means altogether, thus *ngazha thsangka*, we altogether.

NOTE.—*thsangma* is also used with the singular to denote the whole. Example: *zhing de thsangmala chu ranrgos*, the whole field must be irrigated.

THE ADJECTIVE.

Position.—If an adjective be joined to a substantive as its attribute, in ordinary language it usually stands after the substantive. Examples: *sta rgyalla*, the good horse; *chu tsante*, hot water.

Idiomatically we find the adjective before its substantive in certain phrases. Examples: *dambai chos*, the holy religion; *snganmai dus*, the previous time; *zangpoi lugsla*, in a good way.

Especially those adjectives which denote names of nations are placed before the substantive, the *i* of the genitive being joined to the pure stem. Examples: *boddi thrimsla*, according to Tibetan custom; *angrezi specha*, English books.

Adjectives with the ending *can*, having, partake of the nature of participles and mostly stand before the substantive. Examples: *dugcanni rul*, the poisonous snake; *rgyugkhanni sta*, the running horse.

If a participle or an adjective in *can* stands after the substantive, it generally takes the pronouns *de* or *di* or a numeral. Examples: *lug rucho canzhig*, a horned sheep; *sta rgyugkhan de*, the running horse.

If the adjective is placed after the substantive, it takes the case endings, unless it is followed by a pronoun or a word denoting the plural, in which case the latter would take the ending. Examples: *chospa zangpos izug molsong*, the pious man said so; *sta rgyalla des rtsa mangpo zarug*, the good horse eats much grass; *mi khaspa kunni thsodla*, according to the idea of clever men.

Gender.—A few adjectives, when joined to a substantive denoting a living being can adapt their article to the gender of the substantive.

In the first place *rgadpo-rgadmo* must be mentioned here. It means 'old' when said of living beings. Examples: *sta rgadpo*, the old horse; *stargodma rgadmo*, the old mare; *rgyalpo rgadpo*, the old king; *rgyalmo rgadmo*, the old queen.

Then those adjective-substantives which denote names of nations and types of religion are subject to change of gender. They correspond to *angresi*, *boddi*, *ladagsi*, etc., but whilst the latter occur only in an attributive connection, the former are used to form the predicate. Examples: *mi de bodpa, angrespa, mashikapa in*, that man is Tibetan, English, Christian; *bomo de bodmo, angresma, mashikama in*, that woman is Tibetan, English, Christian. Compare under Definite Article.

The *Comparative* in Ladakhi is expressed by *sang* which governs the genitive. Example: *ngai khangpa i khangpai sang rgyalla yod*, my house is better than this one.

Infinitives drop the genitive ending before *sang*. Example: *dagsa las coces sang monlam tabces rgyalla yod*, now we had better prey than work.

NOTE.—Many people, especially in Lower Ladakh, are not strict in using the genitive, so that *sang* seems to govern the accusative at the same time. Example: *bongngu sang sta che*, the horse is bigger than the ass.

For strengthening the *sang* of the comparative the words *theb*, more, and *mangnga*, much, are often added. Example: *ngai khangpa i khangpai sang theb rgyalla yod*, my house is better than this one.

NOTE.—*mangnga* is often used without *sang* to express the comparative. Example: *kho mangnga sogpo* (or *rtsogpo*) *song*, he became still worse.

The Superlative.—It can only be expressed by using the comparative with reference to 'all.' Example: *mi thsangmai sang rgyalla*, the best man (the man, better than all). A very high degree of a quality is often expressed by adverbs such as *mā*, very; *ldingse*, really; *manna*, totally. Examples: *mā gyalla*, very good; *ldingse rtsogpo*, really bad; *manna zhigste*, totally destroyed.

NUMERALS.

Cardinals.—The connecting syllable between tens and units in most case is composed of (1) the first consonant of the stem of each ten, (2) a vowel, (3) the otherwise silent first consonant of the stem of the unit, called *phul*.

The *phuls* of the units are the following: 1 *g*, 2 *g*, 3 *g*, 4 *b*, 5—, 6—, 7 *b*, 8 *b*, 9 *d* (pronounced *r*).

Example: In 43 the first consonant of the ten is *zh*, the *phul* of 3 is *g*, between the two the vowel *a* is placed and thus the connecting syllable *zhag* is obtained. The cardinals are the following:

1 *cig.*
2 *nyis.*
3 *sum.*
4 *zhi.*
5 *shnga, rga.*
6 *drug.*
7 *rdun.*
8 *rgyad.*
9 *rgu.*
10 *scu.*
11 *cugcig.*
12 *cugnyis.*
13 *cugsum.*
14 *cubzhi.*
15 *conga.*
16 *curug.*
17 *cubdun.*
18 *cobgyad.*
19 *curgu.*
20 *nyishu.*
21 *nyishu tsag cig.*
22 „ *tsag nyis.*
23 „ *tsag sum.*
24 „ *tsab zhi.*
25 „ *tsa nga.*
26 „ *tsa rug.*
27 „ *tsab dun.*
28 „ *tsab gyad.*
29 „ *tsar gu.*
30 *sumcu.*
31 *sumcu sog cig.*
32 „ *sog nyis.*
33 „ *sog sum.*
34 „ *sob zhi.*
35 „ *so nga.*
36 *sumcu so rug.*
37 „ *sob dun.*
38 „ *sob gyad.*
39 „ *sor gu.*
40 *zhibcu.*
41 *zhibcu zhag cig.*
42 „ *zhag nyis.*
43 „ *zhag sum.*
44 „ *zhab zhi.*
45 „ *zha nga.*
46 „ *zha rug.*
47 „ *zhab dun.*
48 „ *zhab gyad.*
49 „ *zhar gu.*
50 *ngabcu.*
51 *ngabcu ngag cig.*
52 „ *ngag nyis.*
53 „ *ngag sum.*
54 „ *ngab zhi.*
55 „ *nga nga.*
56 „ *nga rug.*
57 „ *ngab dun.*
58 „ *ngab gyad.*
59 „ *ngar gu.*
60 *drugcu.*
61 *drugcu rag cig.*
62 „ *rag nyis.*
63 „ *rag sum.*
64 „ *rab zhi.*
65 „ *ra nga.*
66 „ *ra rug.*
67 „ *rab dun.*
68 „ *rab gyad.*
69 „ *rar gu.*
70 *duncu.*

71	*duncu*	*don cig.*	86	*gyadcu*	*gya rug.*
72	„	*don nyis.*	87	„	*gyab dun.*
73	„	*don sum.*	88	„	*gyab gyad.*
74	„	*don zhi.*	89	„	*gyar gu.*
75	„	*don nga.*	90	*gubcu.*	
76	„	*dun drug.*	91	*gubcu*	*gog cig.*
77	„	*don dun.*	92	„	*gog nyis.*
78	„	*don gyad.*	93	„	*gog sum.*
79	„	*don rgu.*	94	„	*gob zhi.*
80	*gyadcu.*		95	„	*go nga.*
81	*gyadcu*	*gyag cig.*	96	„	*go rug.*
82	„	*gyag nyis.*	97	„	*gob dun.*
83	„	*gyag sum.*	98	„	*gob gyad.*
84	„	*gyab zhi.*	99	„	*gor gu.*
85	„	*gya nga.*	100	*gya.*	

In ordinary speech it is often not considered necessary to pronounce the numbers in full as given, and in such as are composed of tens and units, the tens are omitted, because they are sufficiently indicated by the connecting syllable. Thus instead of *sumcu so rug* it is enough to say *sorug.*

gya has the phul *b*, which is sounded with the unit in some multiplications of *gya*: 100 *gya*, 200 *nyibgya* or *nibgya*, 300 *sumgya*, 400 *zhibgya*, 500 *ngabgya*, 600 *druggya*, 700 *dunoya*, 800 *gyabgya* or *gyadgya*, 900 *rgubgya*, 1,000 *stong cig* or *stongthrag cig*; 10,000 = *thri cig* or *thrithso cig*; 100,000 *bum cig* or *bumthso cig.*

In multiplications of 1,000, 10,000, 100,000, etc., the multiplying unit is placed after the higher number: *bumthso sum* 300,000.

There are no connecting syllables between the higher numbers, thus 1899 = *stong cig gyadgya gubcu gor gu.*

Reduplication of the cardinals. If the number 'one' be reduplicated, its meaning is intensified. Example: *mi cig cig iru hleb*, only one man has come here, *cig cig* = only, alone, single.

If another number (than one) be reduplicated, it is referred to several possessors, and the reduplication serves to express the pronoun 'each.' Examples: *ngala girmo drug thob*, I have got six rupees; *hlapa kunla girmo drug drug thob*, each labourer has received six rupees; *phed phed*, ½ each.

NOTE.—In compound numbers (also in fractional ones) only the latter part of the composition is reiterated. Examples: *phed ang drug drug*, 5½ each; *phed*

ang nyibgya nyibgya, 150 each; *pheddi phed phed*, ½ each; *gya dang nyishu nyishu*, 120 each.

The suffixes *ka* and *ko* :—*ka* or *ko*, when added to a cardinal number, serves to express the conjunction 'together,' see also Plural *thsangka*. Examples: *daysa i hlui nangnas kangmig sumko tang in*, now we shall sing from this song the three verses together; *ngatang nyiska*, we two together.

Ordinals.—With the exception of *dangpo*, the first, the ordinals are simply formed by adding *pa* to the cardinals; thus *sumpa*, the third; *nyishu tsag sumpa*, the twenty-third.

The Ladakhi makes also use of the termination *ngola* for the notation of the numbers of years, months and days. Examples: *lo nyis ngola*, in the second year; *lza sum ngola*, in the third month.

For the notation of years and days also a very peculiar system of numbering is used. The series runs as follows:

diring, to-day, reckoned as first day; *thore* (*thoras*), to-morrow, or second day; *nangsla*, day after to-morrow or third day; *zhesla*, fourth day; *rgusla*, fifth day; *scusla*, sixth day.

diring, to-day, the first day; *dang*, yesterday, second day; *kharsang zhag*, day before yesterday, third day; *ngunma zhag*, fourth day.

dalo, this year, reckoned as first year; *nanning*, last year, second year; *shenning*, year before last, third year; *rguning*, fourth year; *scuning*, fifth year.

dalo, this year, first year; *nangpar* or *nangmo*, next year; *sangpar*, year after next.

NOTE.—*kharsang zhag* and *ngunma zhag* are also used indefinitely, but definitely in enumeration.

Adverbial Numerals.—Such as 'firstly,' 'secondly,' can be expressed by the ordinals *dangpo*, *nyispa*, etc. Very often instead of them *goma*, at the beginning, and *denas*, then, are used. 'Once,' 'twice,' etc., are expressed by placing *lan*, *thser*, or *lanthser* before the cardinal. Thus *lancig*, once; *thser sum*, three times; *lanthser scu*, ten times.

Also *res*, times (sometimes turn, it is his turn, etc.), may be mentioned here. Example: *darung gyabres sum dug*, we shall shoot again three times (in turns).

Fractional Numerals.—Only *phed*, half, seems to be in general use. With its help 'one-fourth' = *pheddi phed* has also been formed. In the school *cha*, part, placed after the cardinal is used: *sumcha cig*, one third; *sumcha nyis*, two third parts.

THE PRONOUN.

Personal pronouns.—Those specially used in Ladakhi are the following:—

	Singular.	*Singular respectful.*
1st Person	*nga, ngarang,*	
2nd Person	*khyod, khyorang,*	*nyerang.*
3rd Person	*kho, khorang,*	*khong.*
	Plural.	*Plural respectful.*
1st Person	*ngazha, ngatang,*	
2nd Person	*khyozha,*	*nyezharang.*
3rd Person	*khokun (gun),*	*khongkun (gun).*

Though *ngazha* and *ngatang* in many cases may be used alternatively, now and then only the one or the other ought to be used. When connected with a numeral, the idea of the numeral is emphasized by *ngatang*. This is most plainly seen with *thsangma*, all. Example: *ngatang thsangma sdigcan in*, we all (all men) are sinful. *Ngazha thsangma sdigcan in*, we all are sinful, might be said by some thieves.

The compositions with *rang* can always be used instead of the simple pronouns.

Possessive pronouns.—They are formed from the personal pronouns by putting the latter in the genitive, thus *ngai, ngarangngi*, my; *ngazhai*, our.

One possessive pronoun alone does not seem to be derived from a personal pronoun in the way indicated. This is *ngati*, our, (generally used only for the narrowest circle, that is, for things or persons belonging to our house and family). *ngati* might be taken for a genitive, but a nominative *ngad* does not exist. Perhaps it was contracted from *ngatangngi* or developed from *ngedkyi*.

The use of the possessive formed from the personal pronoun is more limited than in English for the following reason:

If the possessive pronoun does not belong as attribute to the subject of the sentence, but agrees with the subject (which may be in the instrumental) in number and person (or nature), then the possessive pronoun is generally expressed by the reflexive *rangngi*, own. Examples: *khos rangngi aba thongs*, he saw his (own) father; *ngas rangngi ama sralrgos*, I must feed my mother.

If the object of the sentence is a living being (which is generally the case in a sentence with to have, receive, need, etc.), then it exercises over the possessive pronoun the same influence as formerly did the subject of the sentence; the possessive pronoun, therefore, must be expressed by *rangngi*, if it agrees with this object. Example: *mi dela rangngi gorces logste thob*, the man has got his coat again.

In all cases *rangngi* may be replaced by the respective personal pronoun, which is a compound with *rang* (after being put in the genitive). Then the subject of the sentence is generally omitted. Example: *ngarangngi ama shralrgos*, I must feed my mother; instead of *ngas ngarangngi ama shralrgos*.

Reflexive pronouns.—The use of *rang* and its compounds has been described under possessive pronouns. When used emphatically, *rang* alone is never used, but always compounds with *rang*. Example: *zampa khorang zhigthsar*, the bridge itself was destroyed.

In the case of the same person being the subject and object of an action, the reflexive pronoun is paraphrased. Example: *khos rangngi zugspola rdungs*, he beat himself.

There exists also a reduplicated form *rangrang*. It is used (but not necessarily) with the plural for expressing 'each his own.' Example: *khot hsangmas rangrangngi khangpala zabthrod tangs*, they all decorated each his own house.

Use of *rere*:—*rangrang* may still be re-inforced by adding *rere*, each. Example: *kho thsangmas mi rere rangrangngi khangpala zabthrod tangs*, they all decorated each his own house.

If *re* stands in simple form (not reduplicated), it means 'one' or 'some.' Example: *lo rela churud cig yongdug*, in some years a flood comes.

Sometimes *re* is to be met with three times in a single sentence, with the verbs to have, to receive. In the first case reduplicated with the possessor, then single with the object of possession. Example: *mi rerela jau re thob*, every man received a *jau* (a coin).

The reduplicated *rere* with the possessor may be dropped, and the remaining single *re* with the object means 'about one each.' Example: *mikunla jau re thob*, they received about each one *jau* (not quite certain, if really all received it).

Reciprocal pronoun.—The English 'each other' or 'one another' is rendered by 'one — one.' Example: *ciggis cig sad*, one killed one, they killed one another.

Demonstrative pronouns.—The most frequently used ones are *i*, this, and *a*, that, which both stand before the word they point out. Examples: *i mibo deru thongspin*, I saw this man there; *a lamla drulshig*, go by that road.

Rather more seldom used are *di*, this, and *de*, that, which commonly stand after the word which they point out. Example: *nasthsul de yamtsan zhig in*, that event is strange.

The pronoun *de* may be strengthened by the ending *na*, and so arises the pronoun *dĕna*, the same, the very same, which stands before the word which it points out. Example: *dĕna mi dang thugsong*, I met with the same man.

In the Rongpa dialect (uppermost Ladakhi), instead of *dĕna*, *deka* is used.

All these pronouns, when standing by themselves, generally take the optional article. Thus *ibo*, this; *abo*, that; *dĕnabo*, the same.

Interrogative pronouns.—In Ladakhi the following are used: *su*, who, for persons; *ci*, what, for things. Both are used indefinitely and independently. Examples: *ci in*, what is the matter? *ci corug*, what are you doing? *su yongdug*, who comes?

ga, which, is used for persons as well as for things attributively. Examples: *ga khangpala thaddug*, which house do you like? *ga mi dang thugsong*, which man did you meet?

ga, when used independently, always points out a definite thing or person. Example: *gabola thaddug*, which do you like? (in a choice).

NOTE.—*su* reiterated, assumes the meaning of some, several. Example: *susu hlebthsar*, several (out of a certain number) have arrived. It is also used interrogatively in a similar way: *susula hla ma thob*, who (of you) has not yet received his wages?

su — su is also used correlatively for expressing 'one — the other.' Example: *su ingngola yongs, su angngola song*, one came here, the other went there.

Relative pronouns.—These are exactly the same in form as the interrogative. They are, however, seldom used. If the subject, object, or adverbial adjunct of the chief sentence be expressed by a subordinate sentence, then the subordinate sentence may be introduced by a relative pronoun.

This is not the case if only an attribute is expressed by a subordinate sentence. Examples: *gabola thadna de nenshig*, take what you like; *sula chagsdug, kho yongdug*, he whom you love is coming. For more particulars see under Conjunctions.

Remarks concerning the Pronouns :—

1. Use of the ending *zug*. The ending *zug* is added to all demonstrative pronouns and to the interrogative pronoun *ga*, in order to generalise their meaning. *Azug, izug, dezug, dizug* mean therefore 'such,' or adverbially 'thus, so.' *Gazug* means 'what kind of?' 'how?' interrogatively, or adverbially 'just as,' 'as.' *Gazug — dezug* are used correlatively. Example : *gazug shmorug, dezug shngarug*, as you sow, so you will reap.

2. Suffixes added to *su* and *ci*.—To generalise *su*, who, the endings *zhig* or *ang* or *zhig ang* are used ; to generalise *ci*, *zhig* or *tongzhig* are added. Examples : *suzhig yongnayang, thadte yongin*, whoever comes is welcome ; *citong zhig khyongna gyogspa khyong*, whatever you bring, bring it soon.

THE VERB.

General remarks.—On the whole the verb in the Ladakhi dialect seems to show a progress in respect to its verbal function, as compared with the verb in the classical language. The verb in the classical language may properly be considered as a verbal noun, for, as Conrady distinctly points out, in the classical language the verbal strength of a sentence lies less in the verb itself, than in the subject of the sentence, whether that be used in the nominative or instrumental. From this cause it happens that in the classical language the same verb may be construed with the instrumental or with the nominative, according as it is employed in a transitive or intransitive sense.

The advance which the verb of the Ladakhi dialect exhibits rests in this, that generally speaking it can no longer be alternately construed with nominative and instrumental, but that each separate verb takes one or the other case alone.

There exist a few verbs which are alternatively used with the instrumental and nominative. They are the following :—

	With Nom.	*With Instr.*
thugces	to meet	to touch.
threlces	to be ashamed	to abuse.

Sometimes also :—

thongces	to look like	to see.
thsorces	to sound like	to hear.
hlabces	to learn	to teach.

The last not in all cases, because a verb *hlobces*, to learn, seems to exist: *khas hlobba zum*, learn by heart.

Thus it comes that the transitive or intransitive force of the sentence no longer lies in the subject alone, but has been partly transferred to the verb.

From the above it follows, that the Ladakhi verbs fall into two great groups, transitive and intransitive, according as they take the nominative or instrumental. According as they denote an action or a condition, they can be divided into active and neuter verbs.

There are these four groups formed :

(1) active transitive
(2) neuter transitive
} construed with the instrumental.

(3) active intransitive
(4) neuter intransitive
} construed with the nominative.

This rule is observed strictly by educated people. Others are not always quite strict. Though they will never use the instrument a with intransitive verbs, they may occasionally use the nominative with transitive verbs. Thus we may hear: *nga cospin*, I did it ; *nga shesdug*, I know it.

Occasionally transitive neuter verbs, especially in Lower Ladakhi, may take the dative instead of the instrumental. Examples: *ngala thsorsong*, *ngala shessong*, I heard it, I knew it.

On the whole the views of Ladakhis as to which group a verb should be placed under agree with those of Europeans. An exception is *thadces*, to like, which always takes the nominative. Example : *nga dela thaddug*, I like it.

Stems of the Verb.

The Ladakhi verb in many cases shows three distinct stems. They are the following :—

1. *The present stem.*—It is found by rejecting the termination of the infinitive. Thus the present stem of *tangces*, to give, is *tang*. The present stem is used in the following forms: Present tense, future tense, negative imperative, infinitive, present participle, gerund in *in*, and supine.

2. *The perfect stem.*—It is formed out of the present stem by adding *s* to the latter. Thus the perfect stem of *tangces*, to give, is

tangs. This *s* is, however, often omitted, and then the perfect stem is not different from the present stem. An *s* is not added:

before an ending { (*a*) if the present stem ends in *s*, as for instance in *shesces*, to know; (*b*) if the present stem ends in *d* and *n*; (*c*) if it ends in *l* and *r*, *s* is also often omitted.

The perfect stem is used in the following forms: Past tense, past participle, gerunds in *te* and *pasang*.

NOTE.—In the Tangthang dialect, the perfect stem is not different from the present stem.

3. *The imperative stem*.—It is formed from the present stem by adding an *s* to the latter and by changing the *a* of the root to *o*. The *s* of the imperative stem is always used before the ending *cig*, and without this ending in stems ending in a vowel. It is also often placed before the ending *tong*. The imperative stem is only used in the affirmative imperative.

NOTE 1.—In the verb *zaces*, to eat, the perfect stem is identical with the imperative stem. It is the only verb which changes the vowel for the past. In simple form the imperative does not take an *s*. Examples: *zo*, eat; *zoshig* (= *zoscig*, see Laws of sound, p. iv), eat; *zos*, *zospin*, I ate; *zothsar*, eaten up.

NOTE 2.—The verb 'to go' has two roots—*cha* and *song*. *Cha* is used in all cases in which other verbs take the present stem; *song* is used for the perfect and imperative stems. Examples: *chaces*, to go; *chain*, going or shall go; *charug*, *chaad*, we, you go; *songste*, going; *songthsar*, has gone; *song*, go; *ma cha*, do not go.

NOTE 3.—Because the *s* of the perfect and imperative stems is not used regularly, it will always be given with the endings.

FORMS OF THE VERB.

The infinitive.—The Ladakhi infinitive ends in *ces* or *ce* in Central Ladakh, in *cas* in Lower Ladakh, and in *ce* in Rong or Upper Ladakh.

Besides this Ladakhi infinitive, the classical infinitive in *ba* or *pa* is also used sometimes, especially with *phila*, for; thus *inbai phila*, for being so.

The supine.—The Ladakhi endings are *casla*, *cesla*, *cea*, according to the respective districts.

Besides this Ladakhi supine, the classical supine in *par* and *bar* is still used in Ladakh. It is never pronounced in full, it generally appears as a simple *a*. If the stem of the verb ends in a consonant, the consonant is

doubled. Examples: *phebar* = *phea*, to be opened; *sampar*=*samma*, to be thought. In certain cases the classical supine must be used:

1. In the respectful construction with *dzadces*. Example: *rgyalpo shmoa dzadsong*, the king ploughed (from *shmoces*, to plough).

2. For the negative of the present with *dug*, *yod*, *rag*. Examples: *drulla mi dug*, *drulla med*, *drulla mi rag*, does not go.

In most cases the classical supine may be used instead of the Ladakhi. Example: *kho ltaa song*, he went to see, instead of *kho ltacesla song*.

In the classical language as well as in Ladakhi, the supine is sometimes used instead of the gerund. Example: *shicesla ma jigssa, barkhanni khangpai nangla song*, not fearing death, she entered the burning house. In classical language: *achibala ma ajigspar*.

Present participle active.—The Ladakhi ending is *khan*, added to the stem; thus *tangkhan*, giving; *drulkhan*, going.

The classical ending *ba* is perhaps hidden in the present in *ad*, thus *yongngad* may be contracted of *yongba yod*, especially as its meaning is approximately 'he is coming.'

Past participle passive.—The Ladakhi endings are *khan* and *skhan*. About the use of the *s*, see Perfect stem. Examples: *shadkhan*, said; *tangskhan*, given; *tabskhan*, thrown.

In a few cases the classical endings *ba* and *pa*, or, with *s*, *spa* are used:

1. Before direct speech the announcing verb prefers to take the classical participle. Example: *khos zerpa*, he said.

2. In a form of the past tense the classical participle is used. Example: *cospain* = *cospin*, he did it.

3. It is used vulgarly at the end of any speech, for instance *mi dugpa*, he is not here.

Gerunds.—The Ladakhi makes use of the following three gerunds:

1. Gerund in *te* or *ste* (about the *s* see Perfect stem). In most cases the *te* or *ste* can be translated by the English *ing*. Example: *deru songste*, going there. This gerund is used for connecting co-ordinate sentences with the conjunction 'and,' or for expressing the conjunctions 'while, whilst', in subordinate sentences. Example: *nga deru songste kho iru hleb*, whilst I went there, he arrived here.

It is used for the present participle only adverbially. Example: *thongste sheste las rtsogpo cos*, he did the bad work seeing and knowing (intentionally).

In a form of the pluperfect it is used instead of the past participle. Example: *coste yodpin*, I had done it.

2. Gerund in *pasang*. It is a more modern form, and was perhaps derived from *pas* and *yang*. In many cases the *pasang* can be translated by 'because,' in others it is usedi nstead of *te*. Example: *mi mangpo dzomspasang, lamas chos shadda dzads*, because many people had gathered, the lama spoke religion (preached).

3. Gerund in *in*, derived from the classical *gin*. It implies a durative sense (for this reason it can often be translated by 'whilst'), and likes reduplication. Example: *guco tangin tangin dugsong*, they remained here making noise.

Present tense.—

A. Simple tense.—Only the present stem is used without any endings:

1. In the negative of the present the negation *mi* is often placed before the simple stem. Examples: *mi shes*, I do not know; *mi thong*, I do not see.

2. Before the postpositions *na, nayang* and *zana*, the simple present stem is used. Examples: *las cona*, if you do the work; *las conayang*, although you do the work; *las cozana*, when doing the work.

B. Compound tenses.—

1. *dug*, joined to the stem. Examples: *tangdug*, I, you, he, etc., give, gives; *shesdug*, he knows. Stems ending in a vowel take *rug* instead of *dug*. Examples: *charug*, he goes; *berug*, it opens.

Negation: The principal verb takes the classical supine, and *mi* is placed between it and *dug*. Examples: *tangnga mi dug*, does not give; *yongnga mi dug*, does not come.

2. *ad* (Lower Ladakhi *ed*) joined to the stem of the verb. This *ad* may have been contracted from *bayod, ba* being the ending of the present participle, so that *tangngad* would be the literal translation of I am giving, *yongngad*, I am coming.

Negation: *med* is placed after the supine (or perhaps present participle) of the principal verb. Examples: *coa med*, he is not doing; *zerra med*, I am not saying.

This form is especially used in lively conversation; in Lower Ladakh the present in *ed* is used almost exclusively.

3. *og*, joined to the stem of the verb. In Central Ladakh the ending *og* is only used with the auxiliary *in*, to be, and almost only in the third person. Example: *ri ning thonpo innog*, the hill is high. In Lower Ladakh it is also used sometimes with other verbs. Examples: *balang-ngis ibo zana, shiog*, if the cow eats this, she dies.

This *og* is said to be identical with the classical ending o, which is used for concluding sentences.

Negation : *innog*, it is; *mannog*, it is not. Other cases are not known.

4. Supine in *in* or *inzhig* and *dug*, if the action of the verb is a lasting one (durative). Example : *las coin* (*coinzhig*) *dug*, he is doing work (progressive).

Negation : *mi* is placed before *dug*. Example : *las coinzhig mi dug*, he is not doing work.

5. rag, feel, added to the supine of the principal verb. Examples : *ngalla rag*, I am tired ; *skomssa rag*, I am thirsty ; *shessa rag*, I know.

This form can only be used with verbs which denote a perception of the senses (with the exception of sight) or an action of the intellect.

Negation : *mi* is placed before *rag* : *ngalla mi rag*, I am not tired.

NOTE.—*zerrag*, I hear or heard say, is probably a contraction of *zerra rag*.

6. Infinitive in *ces* and auxiliary is not considered good language. Example : *mugces man*, does not bite.

Past or *Preterite.*—Most of the forms express at the same time an action which is finished at the present time, and an action finished at some previous time (perfect, imperfect and pluperfect).

A. Simple forms :

1. Some verbs use the pure present stem for the past. This is the case especially with intransitive and neuter verbs and in the negative. Examples : *jung*, it happened ; *rag*, felt ; *thsar*, finished ; *ma hleb*, did not arrive.

Negation : *ma* is placed before the stem : *ma jung*, did not happen.

2. The pure perfect stem (with *s*) is used. This is one of the most generally used forms. Examples : *thongs*, saw ; *yongs*, came ; *tangs*, gave ; *cos*, made.

Negation : *ma* is placed before the stem : *ma thongs*, did not see ; *ma yongs*, did not come.

B. Compound tenses.—

1. in, to be, is joined to the past passive participle in *pa*, *ba*, or, with the *s* of the perfect stem, *spa*. Thus the termination *pain*, *bain*, or *spain* is attained, and generally contracted to *pin*, *bin*, *spin*. Examples : *thadpin*, liked ; *cospin*, did ; *yongspin*, came.

Use of this compound tense :

(*a*) a few verbs use this tense exclusively for the past, for instance *rgoshes* (*rgosces*), to must ; *inces* and *yodces*, to be. Thus *rgospin*, must ; *inben* and *yodpin*, was.

NOTE.—If there is an *i* in the stem of the verb, the termination is generally pronounced *pen*, *ben*.

(*b*) all other verbs form their past tense in *pin*, *bin*, *spin* before the *na*, if, of the conditional. Example : *khyorangngis ngala hun tangspinna*, if you had given me news ;

(*c*) in the principal sentence answering to the conditional sentenee, it is good, but not necessary to form the past in *bin*, *pin*, *spin*. Examples : *khyorangngis ngala hun tangspinna*, *nga yongspin*, if you had given me news, I should have come ; *las gyogspa cospinna* [*las*] *cothsar*, if you had done the work quickly, it would be finished ;

(*d*) the past tense in *bin*, *pin*, *spin* is very much used in lively conversation, rather more for the first and second persons than for the third. In Lower Ladakh this form is used almost exclusively.

Negation : *ma* is placed before the stem of the verb : *ma cospin*, did not do ; *ma yongspin*, did not come.

2. *thsar*, finished, is joined to the present stem of the verb. Examples : *las de cothsar*, the work is done (finished) ; *shithsar*, he died (is dead already) ; *songthsar*, he is gone (already).

This form is perhaps the truest perfect of Ladakhi ; it expresses an action, finished in the present.

The verb *zaces*, to eat, uses the perfect stem (*a* changed to *o*) with *thsar* ; *zothar*, eaten [up].

Negation : *ma* is placed before *thsar*. Examples : *las de co ma thsar*, the work is not done ; *sha darung stub ma thsar*, the meat is not yet minced.

3. *song*, gone, became, is joined to the perfect stem of the verb. Examples : *cossong*, made ; *tangssong*, gave ; *zossong*, ate.

This form, together with the form mentioned under 'Simple forms' 2, is approximately the historical perfect of Ladakhi. It is used very much for narrative and with the third person.

Negation : *ma* is placed before the stem of the verb Examples : *ma cossong*, did not do ; *ma tangssong*, did not give.

4. adpin is added to the present stem of the verb. This *adpin* is probably a contraction of *ba yodpa in*, *ba* being the ending of the classical present participle active, see also Present tenses 2. From this it follows that this form signifies the continued (sometimes repeated) action in the past. Examples: *nanning ngas Muhan Lal thongngadpin*, last year I saw Muhan Lal several times; *ngas specha de silladpin*, I was continually reading that book.

Negation: *medpin* is placed after the supine (or here perhaps present participle) of the verb. Examples: *sillà medpin*, was not reading; *thongnga medpin*, was not seeing.

5. yodpin placed after the gerund in *te, ste*, or after the past participle passive in *khan, skhan*. The gerund is more generally used than the participle. Example: *ngas las de coste yodpin*, I had done the work.

Negation: *yodpin* is replaced by *medpin*: *ngas las de coste medpin*, I had not done the work.

6. tog is joined to the perfect stem of the verb. This form corresponds to the present in *og*, and very likely is the Ladakhi form for the classical concluding *to*, as we have it in *sgyur to*. Examples: *zertog*, said; *yongstog*, came; *tangstog*, gave.

As regards the use of this form, it reminds us of the past in *thsar*, as it expresses the true perfect. It is used principally with the third person. It is never used with an auxiliary, nor with the verbs have, must.

Negation: *ma* is placed before the stem: *ma zertog*, did not say; *ma yongstog*, did not come.

7. adthsug is joined to the present stem. For the derivation of *ad* see *4 adpin*. In Lower Ladakh, instead of *thsug*, *thsogs*, is said, and this *thsogs*, like, always implies the meaning of something doubtful. For this reason the Lower Ladakhi form in *thsogs* may be considered as a form of the dubitative. This accounts for the frequent occurrence of this form of the past in fairy tales. In Ladakh proper, however, the dubitative meaning of the *thsug* has been lost, and the past in *thsug* is used alternately with the other forms of the past. Examples: *yongngadthsug*, he came; *tangngadthsng*, he gave.

Negation: *medthsug* is placed after the supine (or perhaps participle) of the principal verb. Examples: *yongnga medthsug*, did not come; *tangnga medthsug*, did not give.

NOTE 1.—In a few cases the present in *rag* is also used for the past, for instance, *zerrag*, I heard say. If this form is put in the negative *mi* is retained, thus *zerra mi rag*, did not hear say.

NOTE 2.—Persons with forms of the past and present tenses. Most of the forms, mentioned above, can be used with the first, second or third person alternatively. As regards certain forms showing a (never exclusive) preference for certain persons, the following paradigm might be formed:

	Present.			*Past.*	
ngas	*coad*	I do	*ngas*	*cospin*	I did
khyoddis	*coad*	you do	*khyoddis*	*cospin*	you did
khos	*corug*	he does	*khos*	*cos, cosong*	he did
ngazhas	*coad*	we do	*ngazhas*	*cospin*	we did
khyozhas	*coad*	you do	*khyozhas*	*cospin*	you did
khokunnis	*corug*	they do	*khokunnis*	*cos, cosong*	they did

Future tenses.

A. Simple form.—Without an auxiliary the pure present stem is used or the future tense only in the negation. Examples: *mi cha*, shall not go; *mi yong*, shall not come; *mi khyong*, shall not bring.

B. Compound tenses.—*1. in*, to be, is joined to the present stem of the principal verb. Examples: *chain* (contracted *chen*) shall or will go; *tangin*, will give; *khyongin*, will bring.

Negation: *mi* is placed either before the pure stem or before stem with *in*. Examples: *mi cha* or *mi chen*, shall, will not go; *mi tang* or *mi tang in*, shall, will not give.

2. chen, shall go, is placed after the classical supine (in *a*) of the principal verb. Example: *ngarang rgo chugga chen*, I shall close the door, go to close the door.

Negation: mi is placed before *chen* or *cha*: *chugga mi chen*, *chugga mi cha*, shall not close.

3. chen, shall go, is joined to the present stem of the principal verb (probably developed from the preceding form). Examples: *zerchen*, shall, will say; *khyongchen*, shall, will bring. Even *chachen*, shall, will go, is used. This form is very frequent in common speech.

Negation: *mi* is placed before the stem of the principal verb, thus *mi zer*, shall, will not say.

Imperative tenses.

A. Simple forms.—*1.* Many verbs use the pure present stem for the imperative. Examples: *zer*, say; *yong*, come; *khyong*, bring; *bor*, put.

2. Verbs, the present stem of which has an *a* and ends in a consonant, change the *a* to *o*, but do not add an *s*. Examples: *tangces*, to give—*tong*, give; *langsces*, to rise—*longs*, get up; *sgangces*, to fill—*sgong*, fill.

3. All verbs the stem of which ends in a vowel add *s*, *a* being changed to *o*. These alone use the full imperative stem. Examples: *coces*, to do, *cos*, do; *ltaces*, to see, *ltos*, look; *pheces*, to open, *phes*, open it; *thruces*, to wash, *thrus*, wash it.

NOTE.—*Zaces*, to eat, does not add *s*, thus *zo*, eat, is used.

Negation: All simple forms have *ma* placed before the pure present stem. Thus *o* is rechanged to *a*, also *s* is dropped again. Examples: *ma zer*, do not say; *ma tang*, do not give; *ma lta*, do not look; *ma thru*, do not wash; *ma za*, do not eat.

B. Compound tenses.—1. tong, give, is joined to the perfect stem of the verb (*i.e.*, *s* is added to the present stem of the verb, in all those cases when it can be done; *a* is not changed to *o*). Examples: *stances*, to show, *stantong*, show; *tangces*, to give, *tangstong*, give; *chomces*, to jump, *chomstong*, jump.

Negation: see Simple forms.

2. cig is joined to the full imperative stem, (*i.e.*, *a* is always changed to *o*, *s* is always added and associates with the *c* of *cig* to form *shig*; see Laws of sound, *1*). Examples: *stances*, to show, *stonshig*, show; *tangces*, to give, *tongshig*, give; *ltaces*, to see, *ltoshig*, look, or with the first person *ngala yodshig*, I wish I had it; *nga shishig*, I wish I should die.

This form is used:

(*a*) for addressing several persons, a plural form of imperative;

(*b*) it softens an order to a wish, if applied to a single respected person; thus *zigshig*, 'be pleased' to see.

Negation: *ma* is placed before the perfect stem (*i.e.*, *o* is rechanged to *a*, *s* is not dropped). Examples: *ma tangshig*, do not give; *ma stanshig*, do not show.

3. ang, also, is joined to the imperative stem, as it occurs in the simple forms. Examples: *zerang*, say; *tongang*, give; *ltosang*, look; *phesang*, open; *zosang*, eat. It is remarkable that *zosang* has the *s* again.

Negation: *ma* is placed before the present stem with *ang*. Examples: *matangang*, do not give; *malta ang*, do not look; *ma zaang*, do not eat.

4. rgos, must, and *chog*, may, are joined to the present stem. Examples: *chargos*, go, you must go; *tangchog*, give, please.

Negation: *mi* is placed between verb and auxiliary, thus *cha mi rgos*, do not go; *tang mi chog*, do not give, must not give.

NOTE 1.—Interjections, used with the imperative. The oh! of the imperative is expressed either by *ai* (pronounced like the English *i*), or by *wa*; *ai* is always

placed after the verb, *wa* is placed before it as well as after it. Whilst *ai* denotes a friendly request, *wa* emphasizes a strict command. Examples: *iru yong ai*, come here, will you? *wa, iru yong*, come here immediately; *nyid rdemo log ai*, sleep well; *song wa*, go away.

NOTE 2.—If the forms of the imperative be arranged according to their respective force, the following order might be formed: (1) simple form and *ai*: *zer ai*, do say it; (2) *shig*: *zer shig*, be pleased to say; (3) simple form: *zer*, say it: (4) *tong*: *zertong*, well, say it: (5) *ang* and *wa*: *zerang wa*, will you say it immediately?

Reduplication (Reiteration) of the verb.

If in the present, perfect, future and imperative tenses the stem of the verb be reiterated, the reiteration serves to emphasize the verbal idea, and by *da* and *ni*, a following 'but' is intimated:

1. Present tense: In the affirmative *ni*, *ning*, or *da* is placed between the reiterated stem. Examples: *zer ni zerdug*, well, he says, he really says, but, etc.; *tang da tangdug*, well, he gives, he really gives, but, etc.

2. Preterite: *da* is generally inserted between the present and perfect stems. Examples: *khyer da khyers*, it is really taken away, but; *song da song*, he is really gone, but (here the perfect stem is used in both cases); *zer da zers*, he really said, but, etc.

Negation: *ma* or *da ma* is placed between the two stems. Examples: *pkhyer ma khyers*, he really did not take it away; *zer da ma zers*, true, he did not say it.

3. Future tense: *da* or *ni*, *ning* is inserted between the reiterated present stem. Examples: *zer ning zerin*, well, I shall say; *tang da tangin*, well, I shall give it, but, etc.

Negation: *mi* or *da mi* is inserted. Examples: *zer mi zerrin*, I shall really not say it; *tang da mi tangin*, I shall never give it.

4. Imperative: *da* is inserted between present and imperative stems. Examples: *tang da tong*, give it; *za da zo*, eat it; *yong da yong*, come here; *song da song*, or, sometimes, *cha da song*, go away.

Negation: *ma* or *da ma* is placed between the reiterated present stem. Examples: *tang ma tang*, do not give; *cha ma cha*, do not go; *yong ma yong*, do not come.

5. Durative: For expressing the conjunctions 'while, whilst,' the verb is reiterated. See also Gerund in *in*. Examples: *guco tangin tangin dugsong*, they remained here, making noise (all the time); *nga gor gorla iru dug*, stay here, whilst I stop away; *kharzongngi yachula ltalta chubii ldamchu yang bud*, whilst looking at the glacier-water of

the Khardong pass, the pond-water even of Chubi (a village) is lost (a proverb).

6. The present stem of the verb is generally reiterated before *thsugpa*, until, wait until. Examples: *nga cha cha thsugpa shring*, wait, until I go; *yulla hleb hleb thsagpa zaces ma thob*, we received no food, until we arrived in the village.

The Causative.

The Ladakhi makes use of two causatives, the ancient causative and the modern causative.

The ancient causative places *s* before the stem of the verb; instead of *s* sometimes *r* is used; before *l*, *h* is placed: *e.g.*, *nyalces*, to lie down, *snyalces*, to make lie down, put to bed.

The modern causative uses the auxiliary *chugces*, to put in (this is the causative form of *zhugces* [instead of *jugces*] to go in, enter). This *chugces* is placed after the present stem of the verb and the construction is the same as with compound verbs.

Types of the ancient causative:

I. Type	*g=sg*	(Ladakhi orthography *sk*).
II. Type	*g=kh*	(according to Conrady's demonstration *sg* becomes *kh*).
III. Type	*kh=sk*	(ought to be *skh*, but this is an impossible combination in Tibetan).
IV. Type	*kh=k*	(probably developed out of the preceding type, *s* having been dropped).

I. Type: g=sg (sk, sp, etc).

gangces, to be full.	*sgangces*, to fill (*skang*).
barces, to burn.	*sbarces*, to light (*spar*).
gulces, to be moving, shaking.	*rgulces*, to shake.
dreces, to be mixed.	*shreces*, to mix (see Laws of sound, 2).
jarces, to adhere, stick to.	*zharces*, to fasten, affix (parallel to Laws of sound, *1*) *sjarces*, becomes *zharces*.
nyalces, to lie down.	*snyalces*, to put to bed.
drulces, to go.	*shrulces*, to make go, exercise a horse, child, etc. (Laws of sound, *2*).
langsces, to rise.	*hlangces*, to make rise, raise.

cagces, to be broken.	*skagces*, to break (= *scagces*, Laws of sound, *1*).
logces, to go, come back.	*hlogces*, to bring back.
gonces, to be clothed.	*sgonces* (*skonces*), to clothe.
gusces, to be smeared.	*sguces* (*skuces*), to smear.
drigces, to be alright.	*sdrigces*, to make right.
gyurces, to become, to be turning.	*rgyurces*, to turn.

II. Type: g=kh.

budces, to cease, disappear.	*phudces*, to stop.
drices, to be diminishing (*e.g.* water in the river or water from a pot).	*thrices*, to take off (*e.g.*, the stitches when knitting).
bingces, to come, flow out.	*phingces*, to take out.
zhigces, to be destroyed.	*shigces*, to destroy.
zhagces, to be split.	*shagces*, to split.
zhugces, i.e., *jugces*, to enter.	*chugces*, to put in.
babces, to come down.	*phabces*, to throw down.
beces, to be, become open.	*pheces*, to open.
buces, to be blowing (wind).	*phuces*, to blow.

III. Type: kh=sk.

khorces, to cover, surround, whirl about (of snow, fog).	*skorces*, to go round, turn a wheel (in a mill).
kholces, to be boiling.	*skolces*, to cook.
phoces, to come to another place (*e.g.*, water spilled).	*spoces*, to take to another place (*e g.*, a table to another room), take another's work.

IV. Type: kh=k.

thonces, to come, run out.	*tences*, to take, pour out, utter (of the voice).
chadces, to be cut off (wind, sickness).	*cadces*, to cut.
thsugces, to take root, grow.	*tsugces*, to plant (trees).
chunces, to be tame.	*cunces*, to tame.
thsoces, to be boiling.	*tsoces*, to boil.

Quite irregular is *zhonces*, to ride; causative, *skyonces*, to put on a horse (make ride).

A few verbs take *s*, but without a causative sense. Example: *phangces*, to throw away; *spangces* to give up (in a spiritual sense). In most cases, however, *phangces* is used both ways.

The modern causative with *chugces* has the same construction as the compound verbs.

Compound verbs.

Compound verbs are those with two syllables in the stem.

In the affirmative the termination or the auxiliary is placed after the second of the two syllables. Examples: *hagoste*, understanding; *chachugdug*, makes go, sends away; *hagospin*, I understood.

In the negation of past and future the negative particle is placed between the two syllables of the stem. Examples: *nga darung nyid mi login*, I shall not yet sleep; *ha ma gos*, he did not understand; *yong mi chugin*, I shall not make him come; *yong ma chugspin*, I did not make him come.

In the negation of the present tense the two syllables are not separated, and the latter of the two syllables takes the *a* of the supine. Examples: *nyid logga mi dug*, he does not sleep; *ha goa mi rag*, I do not understand; *cha chugga mi dug*, he does not make him go.

PASSIVE CONSTRUCTIONS.*

1. In verbs with two stems (see ancient causative) the simple or neuter form is used for the passive, the causative form for the active. Example: *khangpa zhig thsar*, the house was destroyed; *khangpa de shigkhanni mi*, the man, destroying the house (who destroyed the house).

2. Of the two participles the present participle has an active meaning, the past participle a passive meaning. Example: *tangkhanni mi*, the sending man, the man who sends, is active; *tangskhanni mi*, the sent man, the man who was sent, is passive.

3. A passive of some active transitive verbs is formed by putting them in the gerund in *te* and taking *dug* or *yod* for auxiliary. Examples: *khyongste dug*, it is brought; *ige driste dug*, the letter is written. This form cannot be used with all verbs, but is idiomatic with many verbs.

4. Most forms of the past may be used in an active sense as well as in a passive sense (with active transitive verbs).

* The constructions *ngas cospin*, etc., must not be considered as passives; *ngas cospin* does not mean 'it was done by me,' but 'by me was doing.'

In the active the subject takes the instrumental, and the object the accusative or dative. Example: *ngas las de cospin*, I have done the work.

In the passive the object of the action is put in the nominative. Example: *las de cothsar*, the work was done.

5. All active transitive verbs form the passive indirectly by changing the order of the sentence. Thus the nominative of the English passive sentence is changed to the dative or accusative of an active sentence. Thus instead of 'I am loved,' we say 'he, she, it loves me.' Examples: *khos ngala yasha corug*, he makes love to me, I am loved; *khos ngala rdungdug*, he beats me, I am beaten by him.

The Dubitative.

1. Supine in *a* and *yoddro*, sometimes contracted to *addro*. Example: *tangnga yoddro*, perhaps he will give.

2. Stem of the verb and *indro*. Example: *tangindro*, perhaps he will give.

3. In Lower Ladakh *inthsogs*, joined to the stem, is often used with a dubitative meaning. Example: *tanginthsogs*, perhaps he will give. Also *khag*, *kyag*, joined to the stem of the verb, is often used in a similar sense.

Note.—In many cases *cishe*, who (what) knows, put at the beginning of the sentence, will suffice.

Auxiliaries.

The Ladakhi makes use of three words meaning 'to be': *dugces*, *inces*, and *yodces*. These may often be used alternatively. All form a preterite: *dugs* or *dugsong*, *inben*, *yodpin*. In the past, *yodpin* is the most generally used. A future is formed by *dugces* only: *dugin*. The future tenses of *chaces*, to go, become, and *yongces*, to come, to happen, are often used instead.

The negations are: *midug*, *man* (*main*), *med* (*mi yod*), for the present tense; *ma dugs*, *ma dugsong*, *medpin*, for the past; *mi dugin* for the future tense.

Cases in which only one of the three can be used:—

yodces is used to signify a possession (= to have). Example: *ngala specha sum yod*, I have three books.

If a condition has to be expressed by a sentence the predicate of which is not a verb, *yod* and *in* are used before the *na* of the condition.

Inces must be used for the copula, if the predicate is a substantive and the subject a living being. Example: *mi de ladagspa zhig in*, that man is a Ladakhi.

dugces is mostly used for 'be' whenever it means something like 'to live,' 'to dwell.' Example: *mi de khangpai nangna dug*, that man is in the house; but *yod* is sometimes used in the same sense.

If the predicate is an adjective, *yod* is preferred (but not exclusively) in the affirmative, *dug* in the negative. Example: *ri thonpo yod*, the hill is high; *ri thonpo mi dug*, the hill is not high.

THE ADVERB.

I.—Primitive Adverbs.—For expressing the 'not' of the negation, *mi* and *ma* are used. Summary of the use of *mi* and *ma*:—

ma is used:——

(1) with all forms of the preterite, thus: *ma jung*, it did not happen; *ma cospin*, I did not do it;

(2) before the imperative, thus: *ma tang*, do not give;

(3) before the *na* of the conditional. Example: *khyorangngis las di ma thsarna*, if you do not finish the work;

(4) it is generally used before the gerunds in *te* and *pasang*, as the facts narrated in these sentences are generally considered to have happened before the concluding sentence;

(5) before the supine in *a*, if it is used in a gerundial sense. Example: *cang ma zerra bingste song*, he went out without saying anything.

mi is used:—

(1) in all forms of the future, thus *ngas las di mi coin*, I shall not do this work;

(2) with all forms of the present, thus: *kho yongnga mi dug*, he does not come;

(3) with the gerund in *in*, thus: *mi tangin*, not giving;

(4) before the infinitive (of present and future), thus: *las de diring mi thsarcesla mangpo gors*, in order not to finish the work to-day, they loitered much.

There are many adverbs which are always used with certain verbs and form idiomatic phrases with them.

EXAMPLES:

shrabba shribbe thongces,	to see only a mist.
throb rtsigces,	to pile up all (bricks, wood, etc.).

lib cagces,	to break everything.
lib yongces,	to come suddenly.
lib chongshes (*lcebces*),	to jump suddenly (on a horse).
mog shreces,	to mix altogether.
mog kholces,	to whirl about (many birds, men).
rug (*rob*) *duces,*	to sweep everything (clean away).
chab yongces,	to come at once.
shrarara shrarsong (*chaces*),	to go straight on, without delay.
jababa bab chaces,	to walk softly, lingering.
skoag kogces,	to snatch away.
doag nences,	to fetch quickly, to pick up (learn quickly).

II.—Derived Adverbs.—Those derived from an adjective do not differ from the original adjective, thus : *rgyalla,* good, well ; *gyogspa,* quick, quickly.

Often the adverb is transcribed by *lugs,* way, manner, or similar words. Example : *de yamtsanni lugsla jung,* it happened in a funny way.

Adverbs are derived from verbs by putting them in the gerund. Examples : *gorte,* slowly, from *gorces,* to loiter ; *drulte,* on foot, from *drulces,* to walk ; *zhonte,* on horseback, from *zhonces,* to ride.

Adverbs of place are derived from substantives or pronouns, by adding some local postposition. Many of them are not different from the corresponding postposition ; even *iru,* here, can be used as a postposition with the genitive, thus : *ngai iru yong,* come here to me. A few of the most commonly used are : *thurla,* downwards ; *gyenla,* upwards ; *deru,* there ; *denas,* then, from there.

THE POSTPOSITION.

What Jäschke calls simple postpositions have already been described as case endings. *Dang,* with, by means of, might be added.

Compound Postpositions :

I.—Governing the genitive :

nangna, within, inside.
nangla, into.
nangnas, out of.
rgonas, through.
khanas, through, by.
stingla, after (time).
stingnas, after, behind (time, place).
ka, kh athogla, on, upon, above.
khanas / *khathognas* } from above.
zhesla, after (time, place).

pharkhala, beyond, on the other side.
yognas, from beneath.
gyenla, upwards, uphill.
gyennas, from above.
angola, thither
ingola, hither.
chogsla, in the direction of.
barla, between.
tsa, near, before, towards.
dunla, before.
skundunla, before (a respected person).
dunnas, from before.
gyabla, behind.
gyabnas, from behind.
nganla, *ngunla* } ago, before.
yogla, under, underneath, below.
thsurkhala, on this side.
ltagpala, above.
thurla, downwards, down hill.
thurnas, from below.
phila, for.
chogsnas, from the direction of.
thsabla, instead of.
phugsla or *bugsla*, within, at the far end of (a room, valley).

NOTE: In Lower Ladakhi many of these are governing the accussative.

II.—Governing the accusative:

thsugpa, *thsagpa* } until.
dang nyampo, with.
gyudte, *zhugste* } through.
thsogse, *thsogsla* } like.
dang nyemo, near.
nangltar, like, according to.

III.—Governing the ablative:

pharla, since.
angola, thither, since.

THE INTERJECTION.

The use of *wa* and *ai* with the imperative has been described under Imperative. The following are some of the more commonly used interjections: *wa kun* (*gun*) or *wakunne*, oh, you all; *la*, oh, is said instead of *wa* in Lower Ladakh; *ale*, isn't it so? *ongle* or *oale* or *khas*, *khassale*, well, yes.

THE CONJUNCTION.

I.—Coordinate conjunctions.—The common word for 'and' is *dang*. It is, however, not often used for connecting whole sentences, but several subjects, objects, etc., in the same sentence (contracte dsentence). Example: *ser dang mul dang lcags de thsangma deru yod*, there are gold, and silver, and iron, these all.

For connecting whole sentences, instead of *dang* the gerund in *te* is used; often *yang*, and, also, placed at the head of the following sentence, may be added. Example: *kho iru yongste, logste song*, or *kho iru yongste, yang logste song*, he came here and went back again.

yang, when repeated, has the meaning of 'as well as' (Latin *et—et*). Example: *thruggu yang yongs, ama yang yongs*, the child came as well as the mother.

yangna means 'or,' and is used for connecting several subjects, objects, etc., in a contracted sentence. Example: *ser yangna mul ci khyongnayang*, gold or silver whatever you bring.

In many cases the 'or' connecting coordinate sentences is expressed in the following way: the verb of the first sentence takes the *a* of the interrogative, the second sentence is affirmative, no conjunction is placed between the two. Example: *ladagsla chenna, khaculla chen*, will you go to Ladakh, or will you go to Kashmir?

yangna, repeated, means 'either—or': *yangna rtsogpo inna yangna lenba inna, ngas mi shes*, either he is wicked or he is lazy, I do not know.

For expressing 'but,' *inkyang, inskyang, innayang* may be used; but it must be mentioned that Ladakhis practically do not use these words at all. (In the Kesarmyths—60 large pages—none of these words can be found.)

Another Ladakhi way of expressing 'but' is that of using *ni, ning*, in the sentence with 'but.' Example: *nga songpin, kho ning ma song*, I had gone, but he had not; *mikun song, khurru ning ma khyers*, the men are gone, but the loads are not taken.

A conjunction 'for' does not exist in Ladakhi. As the Kesarmyths show, the Ladakhis are not in need of it. It may be expressed by *ci phila zerna*, if one asks why, or simply *ci phila, cila* may be used.

II.—Subordinate conjunctions.—As many of the conjunctions are properly speaking relatives (*garu* the terminative case, *ganas* the ablative case), the use of the relatives must be defined first. Most of the English subordinate conjunctions do not exist in Ladakhi, and have to be expressed by other words and forms.

1. Use of the relative pronouns:—If the subject, object, or adverbial adjunct of the chief sentence be expressed by a subordinate sentence, then the subordinate sentence is introduced by a relative pronoun. Then the subordinate sentence is placed before the chief sentence and often takes the *na* of the condition. Examples: *sus ngazhala yasha cona,*

mi des ngazhala chadpa phogchugdug, who loves us, punishes us; *nga garu thaddug, deru chen*, where I please, there I shall go.

This construction is not compulsory, and the following may always be used instead of it.

2. If the subordinate sentence contains an attributive adjunct to the subject, object, or an adverbial adjunct of the principal sentence, then the verb of the subordinate sentence takes the genitive of the present or past participle—according to the meaning of the sentence—and is placed before that part of speech to which it belongs. Example: I beat the man who does wrong. Here 'who does wrong' is attribute to 'man,' and so we say: I beat the wrong doing man, *digpa cokhanni mila rdungdug.*

NOTE.—If a subordinate sentence expressing the subject is constructed according to *2*, the participle cannot be put in the genitive, but must be used as an independent subject in the nominative or instrumental. Example: *ngazhala yasha cokhannis ngazhala chadpa phogchugdug*, he who loves us, punishes us.

3. A conditional sentence is very much like a relative sentence under *1.* Then *galte*, if, takes the place of the relative, and the sentence is concluded with *na.* This *galte*, however, is generally left out; when used, it emphasizes the 'if.' Example: *galte ngai tsa yongna, zaces thobin*, if you come to me, you will get food.

4. Subordinate sentencesi ntroduced by the conjunctions 'although' or 'in spite of' are constructed like conditional sentences, and *yang*, also, is added to the *na.* Example: *ngala zurmo yodnayang (naang), nga aru songbin*, although I had pain, I went there.

5. Sentences introduced by 'just as,—so,' are construed similarly to the relative sentences, the subordinate sentence beginning with *gazng, gazugla, gazuggis*, the principal sentence with *dezug, dezuggis.* Example: *gazuggis las cona* (or *corug*), *dezuggis khyorangla hla thobin*, as you work, so you will get wages.

6. To express the idea of simultaneousness (conjunctions 'while, when, whilst'), we may use the following forms:

(*a*) *inzhig* or *inzhigdang* (see Gerund in *in*) is joined to the stem of the verb. Example: *las de coinzhigdang kho hleb*, whilst I did that work, he came.

(*b*) The verb takes the classical supine in *a*, and the ending *zamshigla* is added. Example: *las de coa zamshigla kho hleb*, whilst I did the work (at that very moment) he arrived.

(*c*) *zana* or *zanas* is added to the stem of the verb. Example: *las de cozana kho hleb*, he arrived, when I did the work.

(*d*) The verb is put in the gerund in *te* (*ste*). Example; *ngas las de coste, kho hleb*, he arrived, whilst I did the work (near the end of it).

(*e*) *nam*, when, is placed before the verb of the subordinate sentence, and *na* concludes it. Example: *ngazha deru nam hlebna, kho yang hlebin*, when we shall arrive there, he will also arrive.

(*f*) The verb takes the classical supine in *a*, and *dang* is added. Example: *deru skyodda dang*, whilst going there.

(*g*) *kyia* (corrupted from *kyimala*) is added to the verbs. Examples: *nyima sharkyia kho song*, when the sun was about to rise, he went off; *khyongkyia*, when he brought it.

7. To express the word 'since,' *pharla* is placed after the ablative of the infinitive (ending in *ces* or *pa*). Example: *khyorangla nad phogpanas pharla khyorang ma thongs*, I did not see you, since you were ill.

8. To express 'until' or 'till,' *thsugpa* (*thsagpa*) is placed after the reduplicated stem of the verb. Example: *khyorang ngazhai tsa yong yong thsugpa ngazha iru dugs*, we sat here, until you came to us.

9. To express the conjunction 'before,' *nganla or ngunla* are used. Before one or the other of these words the comparative particle *sang* is placed. Example: *ngazha chaces sang nganla kho hleb*, he came, before we went.

Or the verb takes the classical infinitive in *ba*, *a*, and the negation *ma*. Example: *ngazha ma chavai nganla kho hleb*, he arrived, before we went.

10. To express 'as often—so often,' the verb of the subordinate sentence might be included in *nam—naang* (*nayang*). Example: *nam yongnaang, khyorangngis nga thongin*, whenever (as often as) you come, (so often) you will see me.

11. To express the conjunctions 'because, for the reason, in order to, that,' either *phila* with the genitive of the infinitive, or *la* added to the infinitive, or *pasang* added to the perfect stem are used. Examples: *ngalte yodcessi phila pholong zhiggi khala dugspin*, or *ngalte yodpasang pholong zhiggi khala dugspin*, because I was tired, I sat down on a stone;

logste yongcessi phila (or *yongcesla*) *khola bodpin*, that he might come back, I called him.

12. To express 'by means of,' *rgonas*, *khanas*, and *dang* (*nyampo*) are used with the infinitive. Example: *zhag dang nyungngun zhig hlabcessi khanas ngala hlobs mangpo thobsong*, by (means of) learning a little every day, I made much progress.

13. To express 'so much the more, so much the less,' *mangnga* is used. Example: *dagsa stonla khyagsna, stingla gunla mangnga khyagsin*, if you feel the cold now in autumn, so much the more you will feel it in winter; *dagsa ma thobna, stingla mangnga mi thobin*, if you do not get it now, so much the less you will get it afterwards.

NOTE.—The preceding pages will have shown plainly that in very many cases postpositions are used instead of conjunctions, and that the subordinate sentence becomes part of the principal sentence.

THE SENTENCE.

Arrangement of words.—The verb invariably concludes the sentence. There is no strict rule as regards the arrangement of the other words in a sentence, but the general arrangement is the following: (1) adverb or adverbial phrase of time and place, (2) subject, (3) object, (4) verb. Example: *diring ngas ige zhig driin*, to-day I shall write a letter.

The order of the words belonging to a substantive, is this: (1) the genitive, (2) the governing substantive, (3) the adjective unless it is put in the genitive before, (4) the demonstrative pronoun, *di* or *de*, (5) the numeral, (6) the indefinite article. Example: *ngai bomo chungngun di*, this my little daughter; *rasmarpo zhig*, a red linen; *yul chenmo sum*, three large villages.

The interrogative sentence.—An *a* must always be added to the verb at the end of the sentence, if the sentence has no direct interrogative word such as 'what, how, who, where,' etc. Examples: *khyorang yonginna*, will you come? *su yongdug*, who comes?

The indirect question, introduced by 'if' or 'whether,' must be turned into a direct question, and to express the doubt, the verb is given both in the negative and the affirmative. Example: *khola khyorang yongnginna mi yong, drispin*, I asked him whether he would come.

In *indirect speech*, including wishing, thinking, the speech is generally turned into direct speech. Example: *khyorang diring yongin, sam*, I thought you would come to-day.

If the verb *inces* of the subordinate sentence is in the same tense as the verb of the chief sentence, it may be put into the infinitive (in *ba* or *ces*), and the subordinate sentence becomes part of the chief sentence. Example: *ngas dezug inba thsorrarag*, I heard that it was so.

NOTE.—The classical language uses the supine in *par* in this case instead of the infinitive. The Ladakhi *inba* seems to be an infinitive, as it may always be replaced by *inces*, never by *inees la*.

APPENDIX

TO

SKETCH OF LADAKHI GRAMMAR

CONTAINING

IDIOMS AND USEFUL SENTENCES

WITH

LITERAL TRANSLATION.

Namlda dus 2hi.

Spidka.

(1) Gangs dang kha nyiska zhurug.
(2) Khyags droldug, lcangmala khyigu tangdug,
(3) Ngothsod thsangmala mentog bardug.
(4) Rtsashing nagthsal thsangma ngonpo charug, spidlung dragpo gyugdug.
(5) Sadrod chudrod pheldug, ja thsangmas skad hnyanpo tondug.

(6) La berug, zhingshmos dang ngampo las mangpo thondug.

(7) Saun rdoldug, lud skyarug.
(8) Shol zumcessi skabsla thongskad tondug (or tangdug).

(9) Ma shmoskhanni zhingla tha zerdug.
(10) Skorlung zhigla drephutsub zerdug.
(11) Mentogla hlagspa phogna, phiddug.
(12) Spidnyin ringmola drangsum dang drosum, mithse ringmola skyidsum dang dugsum.

(13) Sala skyare, sngore, mila skyidre dugre.

Yarka.

(1) Yarkala thsad dragpo babste, dongnas shmulchu bingdug.

(2) Lcangmala lobma gyasdug.
(3) Yarthsere mikunnis zhingla chu rante, hlungsla balang thsovala khyerdug.
(4) Thsongpa thsongla charug.
(5) Mentog rigs mi draces mangpo barte, lungpa skampo inpasang-cyang skyea mi dug.
(6) Ri thsangma mela thsigkhan thsogs yod.
(7) Gangrinas phuchu yongdug.
(8) Kha rangngu khordus, ci gon budte ci zai dus.

(9) Kharzongngi yachula ltalta, chubii ldamchu yang bud.

THE FOUR SEASONS.

Spring.

(1) Ice and snow both melt.
(2) Frozen things become free, the willows (all trees) are getting buds.
(3) On all green herbs flowers burn (bloom).
(4) Grass, trees, and the forest all become green, the spring storm runs powerfully.
(5) The warmth of the ground and water increases, all birds pour out their sweet voice.
(6) The passes open, with the ploughing of the fields much work comes out (is to be done).
(7) The seeds spring up, manure is carried off.
(8) At the occasion of seizing the plough, they give (sing) the plough-song.
(9) An unploughed field is called *tha*.
(10) A whirlwind is called 'blowing of demons.'
(11) If a cold wind touches the flowers, they become frozen (fade).
(12) During a spring day it is three times cold and three times warm; during a lifetime we are three times happy and three times miserable.
(13) The earth is sometimes empty [grey], sometimes green; man is sometimes happy, sometimes miserable.

Summer.

(1) In summer a strong heat comes down, and perspiration comes out of the face.
(2) The leaves of the willows become larger.
(3) During summer men irrigate the fields and drive (carry) the cattle to the cultivated land for pasture.
(4) The merchants go for their trade.
(5) The flowers burn [bloom] in many different kinds; because the valleys are dry, nothing grows there.
(6) All hills are like glowing with fire.
(7) From the ice hills comes glacier water.
(8) (Summer is) the time when the flies fly round the mouth, when clothing is taken off, and everything eaten.
(9) Whilst looking at the glacier water of the Khardong pass, the pool-water of Chubi (a village) ran away.

Stonka.

(1) Stonthsad dragpo rag.
(2) Stonla shngabsa rante, zhing shngarug, phorotse corug.

(3) Shingthog thsangma thsosdug, hmindug.
(4) Phorotse bungngu dang yulthagla skyarug.
(5) Deru skamshesla cog tsugdug.
(6) Skampo yodna, khuyus (khyuis) skordug.

(7) Dru thonte, ongs chardug.
(8) Nyema longba, nyema rompo.
(9) Sogma, phugma, rtsangan.
(10) Spidbaddus, stonrdudus.
(11) Ganglessi yangmala ltalta, spithuggi sorgob yang bud.

Gunka.

(1) Gunka khyagsis rdams.
(2) Phorog dang khata yulla babs dug.
(3) Ringgo khas khorpasang rii semscan thsangma hlungsla babsdug.

(4) Rii jashrag mis zumste zarug.
(5) Gunlda sum drongpa dalte dugste, cig dang cig dronres tangdug.

(6) Mul thsangma sing thsarna, kumste dugdug.
(7) Thognas kha ma phangna, cangti yongdug.

(8) Nam khordug. Skarma tranding charug.
(9) Rama thsasla kha chudte yongdug.

(10) Sembid gyugces, rgag gyabces.
(11) Lamla dredda rag.

DUS.

(1) Daspai dus, dagsai dus, maongspai dus.
(2) Sngamo, ngathog; sngamo zangzingla, sngamo skyaod dangpo dang, jaskad dangpo dang, nam langs zamla.
(3) Cinan, thsama, dzara, rgongzan.
(4) Nyimaphed, nyingungngi dus.
(5) Phithog, phidro; munshurubkyila, nyima rgaskyila.

Autumn.

(1) The heat of autumn is (feels) strong.
(2) In autumn the harvest comes, and the fields are cut, sheaves are made.
(3) All fruit cooks (ripens).
(4) The sheaves they carry with donkeys to the thrashing floor.
(5) There they build a heap for drying.
(6) When it is dry, a herd (of animals) turns it about (thrashes it by walking through it).
(7) The grain comes out, and they winnow it.
(8) Empty ears, full (fat) ears.
(9) Long straw, broken straw, weeds.
(10) Spring is the time of working, autumn the time of gathering.
(11) Whilst looking at the fine barley of Gangles (a village), the beards of ears of Spittug are even lost.

Winter.

(1) Winter is fettered with ice.
(2) Ravens and crows come down to the villages.
(3) Because the hill tops are covered with snow, the animals (creatures) of the hills come down to the cultivated land.
(4) Men catch and eat the birds and fowl of the hills.
(5) During the three winter months the farmers are without work, and give feasts to one another.
(6) When all the money is entirely finished, they sit bent down.
(7) If the snow is not shovelled (thrown) from the roof, water comes through it.
(8) The sky is cloudy. The stars become bright.
(9) The goats, knowing the taste (of the grass) etc, come into the garden.
(10) To slide on the ice. To stumble down.
(11) The road is slippery.

TIME.

(1) Past, present, future.
(2) Morning; very early in the morning, with the first dim light, with the first cockcrow, when the sky rises.
(3) First breakfast, second breakfast, midday meal, evening meal.
(4) Midday.
(5) Evening; when getting dark, when the sun is setting.

(6) Thsan; munnag shardug.

(7) Thsanstodla koncogla sova tabrgos, thsanskyilla nyidlogrgos, thsansmadla dzigstenni lasla samba tangrgos.

(8) Dunzhaggi gomazhag.

(9) Za ldava, za migmar, za lagpa, za phurbu, za pasang, za spenba, za nyima.

(10) Nyima dragla cerdug.

(11) Cipai cirid dang nga yongs.

(12) Phatse, butse, datse, zhurabs; yarhun khyad medpa.

(13) Nyingang cig las cospin.

ZHAGZANG, DUSCHEN.

(1) Bagstonni skabsla buthsa zhigla bomozhig bagmala khyerdug; bagma, bagpo.

(2) Nyomi sta dang khyongste, nyenber tangdug; nyopa buthsai aba amas colkhan dug.

(3) Pholdanas dranggyes zhangdug, marnas kalcor rondug, rgordza hlangdug, yar daggila tangdug.

(4) Sangma tagces, zaska lan tangces, drinlan zhuces; drabs chang.

(5) Ma dabcan coces, ali coces.

(6) Memesi yangtsa yungthsa thongs; rgyud thsirgyi batag.

(7) Shava ridags rina drulva miggi rgyan; smanthsarmo shrangna drulva idkyi rgyan.

NADRIGS.

(1) Champa (nacham) yongdug, yama langsdug.

(2) Yacham yongna, so dang namchog nyis narug; nad yangmo, nad lointe.

(3) Yamai rigs nyis: cig yakar, cig yanag.

(4) So bui (bus) zarug; goshrin langsdug.

(6) Night; darkness rises.
(7) In the first part of the night we must pray to God, at midnight we must sleep, in the last part of the night we must think of the work of the world.
(8) The first day of the week.
(9) Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.
(10) The sun touches the rocks.
(11) I came, when the birds were singing.
(12) To all eternity; summer, winter without difference (always).
(13) I worked a full day.

FESTIVAL (GOOD DAY, GREAT TIME).

(1) At the occasion of a wedding they take (lead) a girl to a boy for his bride; bride, bridegroom.
(2) They bring the costumed men with horses, and lift the sticks; the *nyopas* (costumed men) are appointed (to their rôle) by the boy's father and mother [the *nyopas* have to recite all the wedding songs; if they do not know them well, they are beaten with the sticks].
(3) A cake of flour is raised, pieces of butter are smeared (round the mouth of the jugs), beer basins are raised, pieces of butter (called *yar*) are smeared on the bread.
(4) Prepare a feast, return an invitation, return kindness; engagement beer.
(5) To take fine clothes, dress a child prettily.
(6) Grandfather saw many children and grandchildren; in direct line (root) of descent.
(7) The wild deer walking in the hills is the joy of the eye; a fine girl walking in the street is the joy of the heart.

KINDS OF ILLNESS.

(1) Cold in the head comes, earache rises.
(2) When *yacham* comes, the teeth and ears both ache; slight disease, heavy illness.
(3) There are two kinds of earache: one white (slight), one black (heavy).
(4) The worm eats the tooth; the headworm rises.

(5) Phoala badkanni zurmo yongdug ; phoa kabthsad.

(6) Buru mangpo thondug ; drumpa phogna, drumshnag bingdug.

(7) Tsenad yongna, phogkhanni mi dang zan mi za, kha yang mi shre goslag ang mi shre, kanglag thsangma ruldug.

(8) Buru tsirna, shnagshub thondug.
(9) Zugspo thsangma buru dang khyeddug.
(10) Lagpa shrangshes, lagpa shagces.
(11) Migla sha shrin kabces yongdug ; lingthog yongna, sha thugmoi. phila cyang thong mi thub.
(12) Go manna munne thsogs rag.
(13) Thrid yongces, thsalces.

HATRIPAI TSA CHACES.

(1) Gabsha thsongces mi dugga ? Mi dug, dug.
(2) Saglad ngonpoi rin tsam ? Gazha cigla girmo nyis.
(3) Saglad dei nangnas gazha sum cod !
(4) Stongskud, resimi skudpa.
(5) Goshen (=goschen) Genkhaab Zarbaab.
(6) Thsongzog gyogspa hlebinna ?
(7) Thsongzog de thsangma ganas khyongdug ?
(8) Nyerangngis ngala girmo gya karskyin salinna.
(9) Bulonla mi tang ; bundag.
(10) Bulon rtsodrgos ; babcilus, baki.
(11) Lcagzo, mulzo, shingzo.
(12) Nyangces, ltaces zhig tong !
(13) Mul thsangma gyaggoa tangste, godla song.

ZHONCES.

(1) Stala rga gyogspa stod !
(2) Stala rgalpa ma thontogga ?
(3) Sta de drogs mi drogskhan yodda ?
(4) Shrunpo dugga, kha bolmo dugga ?
(5) Obchen, oblung, skrabs, shrablung.
(6) Sta thurgo dang tagrgos, zilcha.
(7) Sta drulla mi rag !

(5) To the stomach the mucus illness comes ; the stomach has gastric catarrh (all covered with mucus).
(6) Many boils come out ; if smallpox hits (a man), the pus of smallpox comes out.
(7) If leprosy comes, they do not eat food with the stricken man, do not mix mouths (speak), do not mix clothes, his hands and feet all become rotten.
(8) If you press a boil, the pus cover comes out.
(9) The whole body is covered with boils.
(10) Swelling of the hand, to cut the hand.
(11) There comes a cloud of flesh to cover the eye (*Pterygium*). When cataract comes, you cannot see anything on account of the thick flesh.
(12) The head feels giddy.
(13) To sneeze, to choke.

Going to the merchant.

(1) Are there not boots to be sold? No, yes.
(2) What is the price of the green cloth ? One yard two rupees.
(3) Cut me three yards from that cloth !
(4) Silk thread.
(5) Silk cloth, gold braid, silver braid.
(6) Will the goods arrive soon ?
(7) From where do you bring all those goods ?
(8) Will you kindly lend me a hundred rupees ?
(9) I do not lend ; the creditor.
(10) I must demand debts ; balance.
(11) Goods of iron, of silver, of wood.
(12) Give me a sample !
(13) He spent much money and wasted it.

Riding.

(1) Saddle the horse quickly !
(2) Has not the horse a sore back ?
(3) Does the horse not shy ?
(4) Is it safe, is it soft-mouthed ?
(5) Stirrup, stirrup-strap, headstraps, bridle.
(6) Fasten the horse with the stable strap, saddle cloth.
(7) The horse will not go !

(8) Sta ldarab dang druldug, yorga dang druldug, gyogyor dang druldug.
(9) Sta thurru dang ragste.
(10) Sta spukha ngonag, sta skyangngu, olla, olla stingkar, ngangpa, thrao, ablag, ragpa.
(11) Stazhon gochag, bongzhon lagchag.

(12) Migpa gyabces.
(13) Stas dug bagtog.
(14) Polo rtseces, polo halka song, polo muldar song, draphogs gyabces.

Spon, beda.

(1) Sponnis thangka (skuthang) zhangsdug.
(2) Rimo drices, tsi gyabces.
(3) Kartsi skuces, bag coces.
(4) Rtsi sosoi ming ning: liti, thsal (marpo); an (karpo); ting (ngonpo); spangma (ngonpo); serpo; ṣhmugpo.
(5) Lu nyagssi kha tangrgos.
(6) Rolmo, gartse hlulen.
(7) Sarangi, gopong, beang shrogces.
(8) Rolmo thrabces; daman, dabs rdungces.
(9) Surna, hlingngu, thredling phuces.
(10) Gyaling ning lamai surna in, gyadung thsangmai sang chenmo in; shkangling.

(11) Beda ning marabs rigsmed; spon ning yarabs, rigs sang.

Mentog.

(1) Thsephadla curu thsogs, kabrala nyuti thsogs drasbu chags dug.
(2) Kabra ning kante thsangma budcesla chuorla tangdug; denas thsodma thosgs tsorug.
(3) Sarishradmai saun mongedal thsogs yongdug.
(4) Drimoggi batagnas thrag thsogs marpo thonte, ramai thraggi thsabla chodpala skurug.
(5) Pololing, sea, droma, gararutse, conjor, ganglanagla, skyalbu mentog.
(6) Rirgognas thsongngi thsabla skotse shragdug.

(8) The horse gallops, canters (in a Ladakhi way), canters quickly.

(9) A horse with a foal.
(10) A horse of black blue colour, chestnut horse, of black colour, black with white hindfeet, bay horse, dappled horse, whitish horse.
(11) Horse riding (causes) head breaking, donkey riding (causes) hand breaking.
(12) To shoe a horse.
(13) The horse has eaten poison (a poisonous plant).
(14) To play polo, the ball has gone through the goal, has missed the goal, to hit the ball at the beginning of the game (in the air).

PAINTER, SCULPTOR; MUSICIAN.

(1) The painter prepares the cloth (for his painting).
(2) To write (paint) a picture, to colour.
(3) To smear white colour (whitewash a room). To make masks.
(4) The names of the different (pigments) are: red, white, blue, green, yellow, violet.
(5) You must sing the song according to the tune.
(6) Large instrument, music for pleasure.
(7) To play the violin, guitar.
(8) To play the harmonium, beat the drum, tambourin.
(9) To play the clarinet, flageolet, flute.
(10) The *Gyaling* is the clarinet of the lamas, the *gyadung* is the largest (instrument); flageolet made of the human thigh bone or of brass.
(11) The musician is low, of no caste; the painter is high, of good caste.

FLOWERS.

(1) The *thsephad* produces fruits like coral, the *kabra* like pears.
(2) To extract all the bitterness from the *kabra*, they soak it, then they cook it like a vegetable.
(3) The seed of *sarishradma* is (comes) like *mongedal* (peas).
(4) Out of the root of *drimog* blood red (colour) comes; it is used instead of the blood of goats for offerings.
(5) Mint, rose, potentilla, a labiata, glacier-potentilla, primula, anemone. (leather bag).
(6) From the hill-garlic they roast cakes (which are used) instead of onions.

(7) Mishrolnas dara dang drangthur corug.

(8) Skalzangmentog, khilagpamentog, Reskompa.
(9) Mentoggi lobma dral cigcig yodkhanla skyangthsag, dral mangpo yodkhanla rgurthsag zerdug.

SANGGYESSI CHOS.

(1) Sngongyi nampar sminpa.

(2) Skyeva nences.
(3) Drova rigs drug : hla, hlamayin, mi, dudro, nyalva, idag.

(4) Skyerganachii dugngal.
(5) Jamyang, Chagdor, Candrazig ning stanba shrante tsugkhan in.

(6) Khogunla shrulpa zerdug : Khokunnis mane zhangces dang mane skorces dang trangnga skorces dang skorra skorces dang mane tonceala tekhanni shoga thsangma tsugs.

(7) Zodpa ltabui geva med, zheddang ltabui digpa med.
(8) Skalpa nyigmai dus, skalpa logla, jugla.
(9) Thalbala gyurces ; ringshrel.
(10) Chogs zhii shrulpai ming ning : Lodzambuling, nubbalangscod, sharlus bagpo, jangdraminyan.

(11) Lama ranggo ma thonna, shinpoi yandren ci coin ?

(12) Bongngui namchogla ser lugna yangna thalba lugna, cigcig in.

(13) Rangskyon phad gang borte, miskyon rgyegangla ma threl.

(14) Stembrel ; stagspa thondug.

(15) Gyan gyabces, mo gyabces.
(16) Colo rtseces, ngags tangces.

LAGSHESPAI LAS.

(1) Lagshes kungyi yogpo in, stamshes kungyi sponbo in.

(7) From the *mishrol* they make with butter-milk (a dish called) *drang thur*.

(8) Aster, Cammomilla, Arnica.

(9) A flower which has only a single row of petals is called simple ; if it has many rows of petals, it is called a ninefold (flower).

Religion of Buddha.

(1) The previous things ripen, (become more perfect through many births).

(2) To take birth, rebirth.

(3) There are six kinds of existence : Gods, not being gods (a little lower), man, animal, hell, beings with very small mouth, who always hunger.

(4) The misery of birth, growing old, illness, and death.

(5) Jamyang, Chagdor and Candrazig are those who planted the teaching firmly (in people's minds).

(6) They are called incarnations ; they have planted (established) the custom of building *mane* walls, turning prayer wheels, turning (using) rosaries, going round holy places and uttering *manes* (*i. e.*, om mani padme hum).

(7) There is no virtue like patience ; there is no sin like anger.

(8) At the end of a kalpa (100,000 years), never.

(9) To become dust, wither ; bone of a saint.

(10) The names of the Bodhisattvas or continents of the four directions are : Lodzambuling (south), Nubbalangsood (west), Sharlus-bagpo (east), Jangdraminyan (north).

(11) If the lama does not come out (cleanly) with his own head, how can he draw upwards the dead ?

(12) It is the same, whether you pour gold or dust into the donkey's ear. (Religion is not for stupid people.)

(13) Putting aside the large bag with your own faults, do not deride the little bag of the other.

(14) Progress in the welfare of the soul ; a sign comes out (said when a well-known sinner comes to misfortune).

(15) Cast lots, cast lots in a religious way.

(16) To play at dice, recite incantations.

Artisan's work.

(1) Who is clever with his hand, is servant of all ; who is clever with his speech, is master of all.

(2) Thsarnyan yongnga mi dug.
(3) Gabsha kangpala thrig gadda rag.
(4) Kot throdda mi dug.
(5) Hlamkhan, thsempopa, shabthsongpa, shingkhan, gara, sergar.

(6) Lasla lamkhan zhig, las mi lamkhan zhig.
(7) Ngas kharlen tangdug.
(8) Khangpa stadla borcessi rdungmala ka zerdug, thoggi shing rompola mardung, thsadmai shingla burdung, shing thramola thrallu zerdug.
(9) Rtsigpa ; phullu.

SOLKHANG.

(1) Me phu rgos ; me thugssa mi dug.
(2) Oma nante khyongs ; alu phagspa ma shua khyongnga ?

(3) Kho sha khabcudte dug ; zaces gyesmo mi dug.
(4) Sha, oma ruldug.
(5) Nga chang thungcesla ma jangkhan in.
(6) Dzangs ma co !
(7) Nodpo sulu bulu song.
(8) Zangbus sharag sharag zerdug.
(9) Dram, nyungma, shranma, serragthurman, povarilu, tsa, massalla.
(10) Ma bu drabsthun chana, thsalgo thsodmas chod.

HLABZHA TANGCES.

(1) Shed dang zer, shubste ma zer !
(2) Khas hlobba zum ! Hlonas zum !
(3) Hlola jangte dug, iddu yongdug.
(4) Thsirri kha zer ! Thsabig sheshes mi rag !
(5) Snyug lce rompo rag, nagtsa mi dug.
(6) Iru don mi rag, thrig zobsong.
(7) Ha ma zerte, nying zhurte sil !
(8) Thsigs tangces, kha kyeces.
(9) Samig ltaces.
(10) Samba sngonla ma tangna, gyodpa stingnas yongdug.
(11) Zocan drigos ! Thsirug tangces.

(2) He never gets ready (readiness does not come).
(3) The boots fit well (on the foot).
(4) The coat does not fit well.
(5) Shoemaker, tailor, butcher, carpenter, blacksmith, gold (silver) smith.
(6) A diligent worker, a lazy worker.
(7) I build a house.
(8) The beam which keeps the house erect is called pillar, the big beam of the roof is called motherbeam, the middling one boy-beam, the thin sticks are called *thrallus*.
(9) A wall, a small hut.

The Kitchen.

(1) Make (blow) fire! The fire will not burn.
(2) They brought extra much milk; shall I bring the potatoes unpeeled?
(3) His mouth waters for meat; the food is not savoury.
(4) Meat becomes rotten; milk becomes sour.
(5) I am not used to drink beer.
(6) Do not be embarrassed! (se gêner).
(7) The pot broke to pieces.
(8) The boiler hums.
(9) Cabbage, turnips, peas (beans), carrots, pepper, salt, spice.
(10) If mother and daughter agree in their counsel, breakfast (may) be cut off with vegetables (only).

To Teach.

(1) Speak loudly (with force), do not speak softly!
(2) Learn by heart!
(3) I remember.
(4) Say it word by word! I do not know it well!
(5) The pen is broad, there is no ink.
(6) This I do not understand, guessed right!
(7) Not yawning, read with thought!
(8) To scold.
(9) Looking to the ground.
(10) If you do not think about it first, you will repent afterwards.
(11) You must write nicely! To do arithmetic.

YANGSPALA CHACES.

(1) Nga dang nyampo chanyin ragga ?
(2) Diring charpa mi yonginna ?
(3) Kho lam chugspin, kho suste songspin.
(4) Basgo thsugpa draglam tsam yod ?
(5) Lam largu lungrgu zhig yod.

(6) Yonchogsla song, yaschogsla song, gyabla song, drangpoa song.
(7) Ngala thsadpa rag, nga skomssa rag, nga ngalla rag.
(8) Nga kangzhenla chen.
(9) Gonces yanglugga gonte chen.
(10) Mingan thsogs sebla songspa, shingngan taku dang thug.

TO GO FOR A WALK (FOR PLEASURE).

(1) Would you like to go with me ?
(2) Will it not rain to-day ?
(3) I had put him on the road, I had gone to meet him.
(4) How many mail stages are there to Basgo ?
(5) It is a very uphill and downhill way (there are nine passes and nine valleys in it).
(6) Go to the left, to the right, backwards, straight onward.
(7) I am hot, thirsty, tired.
(8) I shall go barefoot.
(9) I shall walk, carrying my outer clothing.
(10) A bad man had gone into the middle of the wood ; there he met only with crooked, bad wood. (In a bad man's eye everything looks bad.)

G. I. C. P. O.—No. 680 H.D.—29-8-1901—700.—C. M. W.